

Minnesota Management Review

School of Management, University of Minnesota

Winter 1986
Volume 5, Number 2

Crisis Management

Successful strategy includes preventive and corrective measures

by Richard A. Edwards

Crisis, like beauty, is in the eye of the beholder. Some individuals and corporations view an incident as a momentary inconvenience. Others perceive the same incident as time for the panic button. Knowing the difference is the first step toward effective crisis management.

Crisis, like beauty, can be managed — but only to a point. Preventive crisis management confronts the limited ability of a corporation to control some features of its external environment: tornados, floods and other natural forces. Knowing which can and cannot be controlled is the second step toward effective crisis management.

Crisis, unlike beauty, has been the subject of surprisingly little published analysis — as distinguished from media coverage of events which cause major harm to life and property. The 1985 edition of the premier journal of corporate external relations, the *Public Affairs Review*, carried a thoughtful review of crisis management as its lead article. But the total quantum of material on the subject falls far short of its importance. Few business activities are more important to corporate growth than effective strategic planning, and few events put a greater strain on the orderly implementation of plans than a major crisis. Yet both the frequency and the severity of corporate crises are growing. Therefore a review of the basic principles of crisis management is in order.

Potential Crises

The type and severity of crises to which a corporation is vulnerable partly depends on the nature and diversity of its products and services, how preventive measures are formulated, and how



skillfully senior management responds when the crisis occurs. Although the crises of major corporations receive much publicity, small and medium-size companies are also vulnerable.

The crisis may occur in the form of natural events such as earthquakes, tornados, floods or fires. They may be occasioned by civil disorders or even criminal acts of commercial sabotage.

They may flow from corporate error or the failure of critical equipment. Contaminated food, improperly packaged drugs or

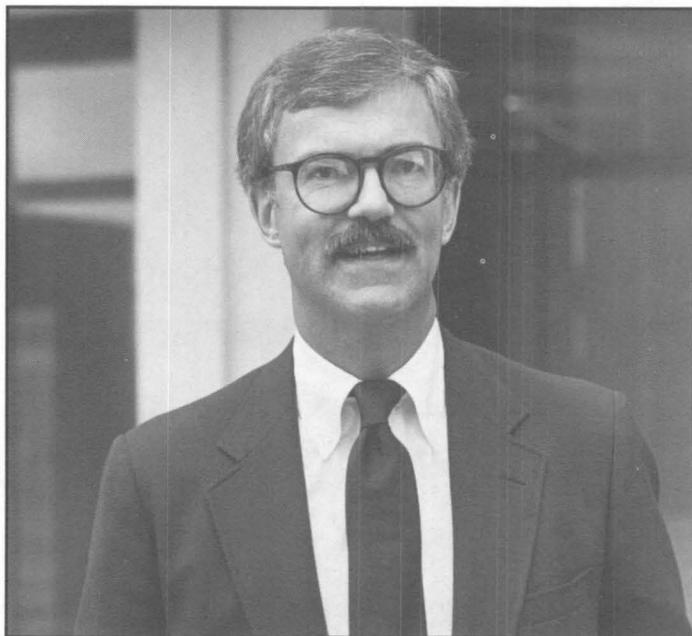
Crisis Management to page 4

To our readers: New section about School of Management centers launched

A goal of excellence in teaching, research and service requires a diversity of activities and approaches. The research centers at the School of Management have been at the forefront of innovative design and delivery of service to scholars and practitioners since the inception of the Industrial Relations Center, with its unique governance board of industry and labor representatives, in

1945. The Management Information Systems Research Center, founded in 1968, is the nation's oldest academic research center devoted to the field and is completely supported by industry. Additional centers in Strategic Management, 1984, Operations Management, 1983, and Accounting, 1980-81, are focal points for the industry/academic partnership that characterizes the school. Each is tailor-

made to service the marketplace. How do the centers work? What do they offer? Who is involved? CENTERLINE: News and Notes from the Research Centers, a new section debuting in this issue of the *Minnesota Management Review*, will tell you. Look for CENTERLINE in the middle of the book.



Dean's Message

Preston Townley

American business is experiencing what the pundits term an "entrepreneurial renaissance." And this renewal of individualism, creativity, vision and leadership in the management community has given Minnesota much better than average marks in economic rejuvenation.

In the last decade, Minnesota's manufacturing firms produced 20,000 additional jobs in the state. Many of those jobs were contributed by fast-growing small and medium-size firms, especially in high technology. CPT Corp. grew 14 times larger in 10 years. Data Card expanded sevenfold. And Cray Research exploded by 6,262 percent—from 21 to 1,336 jobs.

Earl Bakken, Curt Carlson, Seymour Cray, Willis Drake and Dean Scheff are but several examples of the entrepreneurial spirit that helped shape Minnesota's outstanding track record of developing big business from the smaller enterprise. Sixteen Twin Cities-area firms made the most recent *Fortune 500* list in 1984, up three from the previous year.

The state's smaller, fast-growth companies are well represented in other measures of vitality. EMPI, FilmTec and Lee Data joined the most recent edition of *INC* magazine's prestigious *INC 100* list of America's fastest growing, publicly held companies.

What is the role American schools of business and the School of Management at Minnesota in this "entrepreneurial renaissance?" Our Placement figures indicate that more than 50 percent of School of Management graduates are now finding employment outside the *Fortune 500*. More and more of them are taking first jobs with small business and even starting their own firms. We at the U of M School of Management are determined to be instrumental to their success and enhance our role in the state's economic development.

It is no longer the entrepreneurial spirit that we need to foster. Minnesota is not hurting for new ideas and initiatives. The real need is reflected in the statistics. An annual failure rate of 80 percent haunts new business start-ups, both locally and nationally.

Traits like independence, creativity, vision and drive are inherent in the successful entrepreneur. Not much to teach there. But when the successful start-up reaches the size that requires managing and the direction of people the story changes. How do we meld those individual personal characteristics to leadership and managerial skills? How do we provide the cross-disciplinary orientation that will help the accountant turned entrepreneur understand how a product is successfully marketed, make the engineer/entrepreneur savvy about financial budgeting? And help them all with perhaps the most critical skill, people management?

We intend to enhance our scholarly focus with increased efforts in entrepreneurship research, curriculum development and executive education. The state university ought to be uniquely positioned to offer a School of Management capable of leading entrepreneurship research and education. We should be increasingly willing to boost management education's role in assuring new venture success and its attendant job creation for Minnesota's economic future. Minnesota's continuing "entrepreneurial renaissance" will benefit from dynamic interaction between education and business. The School of Management and its alumni should help the process. Please let me have your thoughts. □

Minnesota Management Review

Published by the School of Management,
University of Minnesota,
Minneapolis, Minnesota 55455.
Third-class postage paid at Minneapolis.

Anne M. Benisch
Associate Dean, External Affairs
(612) 376-8284

Gretchen Roufs
Director, Alumni Relations
(612) 376-9483

Jeanne Carroll
Assistant Director, Alumni Relations
(612) 376-3217

Leslie Walters, Editor
Assistant Director, Community Relations
(612) 373-5901

Tim Rummelhoff, Photographer

Darlene Gorrill, Layout

Deb Stika, *CENTERLINE* designer

Laurel Hamilton, Special Assistance

The University of Minnesota is committed to the policy that all persons shall have equal access to its programs, facilities, and employment without regard to race, religion, color, sex, national origin, handicap, age, or veteran status.

Undergraduate, MBA programs rank highly

School of Management MBA and Undergraduate programs both fared well in recent surveys that ranked the nation's top business schools.

Surveyed executives at 134 national companies placed Minnesota in the list of top 20 national MBA programs. Results were published in the *Wall Street Journal*. Meanwhile, *Money* magazine placed the school in its December 1985 top 10 listing of national undergraduate business programs.

"Any ranking scheme is far from perfect," Norman Chervany, director of the school's professional management programs, is quick to point out, "but they do provide some useful data on program quality." No matter the degree of accuracy, business school rankings usually attract wide attention because competition to enter the top programs and for hiring top graduates is fierce.

Brecker & Merryman Inc., the New York management consulting company that conducted the MBA study, sent questionnaires to 250 of the largest national industrial and service recruiting companies in the country. The 134 respondents hire many MBAs; eight of the 134 hired more than 100 graduates in the 1983-84 academic year. The respondents included 15 of the 20 largest U.S. banks, the Big Three auto makers, five major energy companies and leading investment banking, accounting and consulting firms. General Mills, The Pillsbury Co. and Control Data participated in the survey.

The School of Management placed 20th; Northwestern (Kellogg), Wharton and Harvard placed first through third respectively.

"Make no mistake about it, the School of Management was delighted with the recognition and visibility," said Chervany. However, Chervany maintains that the school, at 20th place, was sold short.

Brecker & Merryman listed 21 business schools as a starting point to make their selection. While respondents were allowed to evaluate only those schools where they recruit, they were free to add any schools not on the original list. No other schools, however, ended up ranking higher than the original 21. Schools received five points for a first-place vote, four points for second, etc. "If a company didn't recruit at Minnesota, it couldn't rank us," Chervany noted.

Convinced that the original rankings caused some distortion, Chervany adjusted them by calculating the original points received as a percentage of the maximum points possible. While Northwestern, Wharton and Harvard remained the top three, conversion produced significant changes for other schools. It boosted Minnesota to 18th, placing the school ahead of Massachusetts Institute of Technology and the University of Texas at Austin. In the same adjustment Indiana climbed from seventh to fourth, and traditional frontrunner Stanford went from ninth to seventh.

All ranking programs are somewhat flawed, Chervany reiterates. But he is quick to add that the Brecker & Merryman study provides some important feedback. "It is confirming evidence of the school's continued and enhanced quality as well as our increased visibility among employers. Our constituents—both employers and students—react to the rankings." For example, the number of students who requested information about Minnesota at the Chicago MBA Forum in October increased 27 percent. Chervany

added that many of the comments at that forum reflect an awareness of the *Journal* article.

Moreover, Brecker & Merryman may help make up for some missed opportunity in employer recruiting, Chervany adds. Out of 134 companies, only 20 recruited at Minnesota. While Motorola is the only one of several new recruiting companies that Placement Director Jan Windmeier directly attributes to the survey, she predicts that it will make more and more national firms consider Minnesota fertile ground.

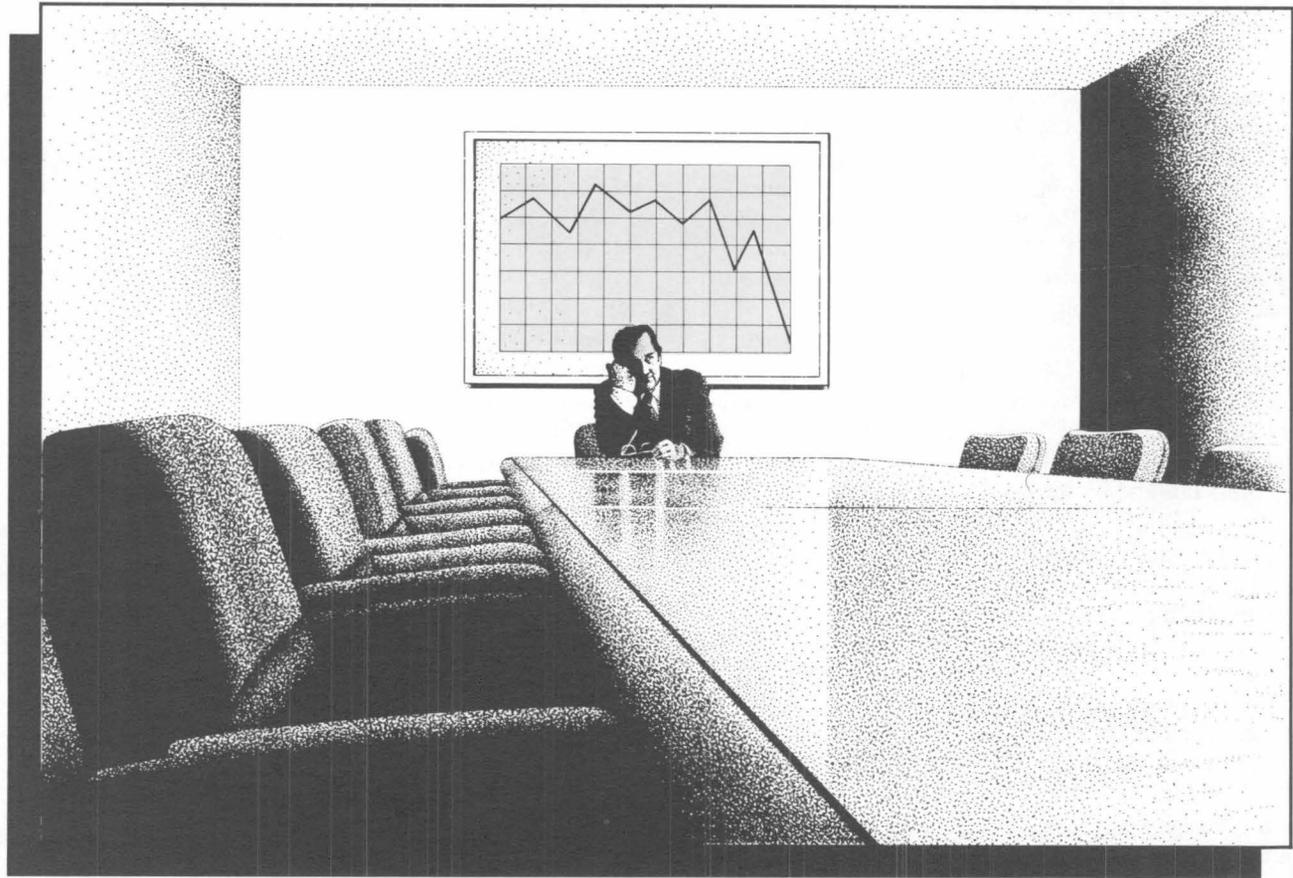
The undergraduate ranking was based on interviews of dozens of corporate recruiters, business school deans and heads of educational foundations by *Money* magazine. The magazine listed information systems and marketing as the school's strengths.

"[The Brecker & Merryman Survey] is confirming evidence of the school's continued and enhanced quality as well as our increased visibility among employers."

In selecting its top 10, *Money* emphasized the importance of a solid liberal arts education. About 50 percent of Minnesota's curriculum is comprised of liberal arts courses. The magazine also lauded the school for requiring an above average grade point average for admission. Indeed, Minnesota has worked hard to build undergraduate and MBA programs that complement each other in strength and quality. The magazine noted that the two don't always correlate.

Acting Director of Undergraduate Studies Jerry Rinehart agrees that the increased visibility is most welcome. He attributes it largely to Minnesota's win at the 1985 McIntire Commerce Invitational case study tournament at the University of Virginia-Charlottesville.

It is ironic that Minnesota should make its way into the top ten undergraduate business schools at a time when University President Kenneth Keller has proposed a major enrollment reduction for the school. "It's quite in keeping with our commitment to quality," Rinehart adds. "The *Money* ranking reinforces quality in undergraduate curricula and programs. An enrollment reduction would simply enhance the student's overall undergraduate experience." □



Well-managed crisis could present opportunities for companies

Crisis Management from page 1

chemicals, the storage or transportation of explosives or toxic materials, hazards to the health and safety of employees — all these and more contain the potential for a major corporate crisis. The fundamental principles of effective crisis management are usually divided into two categories: preventive measures and corrective measures.

Preventive Measures

■ **Identify the scope and nature of crisis risks for a particular corporation.** Review products and services to estimate the dangers of a disaster occurring, seriousness if it does occur, probable degree of permanence of damage, effect upon public confidence in the company, and possible motives of individuals who might wish to cause such a crisis. The review of products must be done with an awareness of the high correlation between concentration of a company's sales in a single product, and the capacity of a disaster involving that product, for serious financial harm to the corporation.

■ **Review intensive past crises arising, within your company or its competitors, from products and services similar to those you offer.** Examine each such precedent to answer the obvious questions: What steps would have prevented the occurrence? What steps would have contained the event and limited its harm? Are there changes in packaging, marketing or distribution which would either reduce or exacerbate your products' potential for causing harm?

■ **Combine the data emerging from the first two steps.** This will help you identify changes in your corporation's procedures which will minimize the danger of a crisis arising from the manufacture and distribution of your products.

■ **Fix responsibility within the company for response coordination in case of a crisis.** Make available all relevant internal and external expertise to that individual. Direct the preparation of a crisis manual (loose-leaf for updating) which specifies who is responsible for each portion of the corporate response, determine each portion's priority, assign reporting responsibilities, and direct informational liaison with each of the company's stakeholders. The latter would include, of course, federal and state legislators, regulatory officials, employees, shareholders, the media, community leaders and other companies within your industry.

■ **Hold frequent meetings and rehearsals.** This will help keep senior management aware of the potential for crisis, allocation of resources and responsibilities to cope with each form of crisis, and the importance of an effective response to the company.

Corrective Measures

No corporation can either foresee all possible combinations of circumstances which can cause a crisis or identify every step needed to prevent it. Some crises seem to overwhelm the company's response capacity. But, as William James said, "Great emergencies and crises show us how much greater our vital resources are than we had supposed."

■ **Prompt assembly of all corporate personnel with specific duties or those who are useful is the first step after a crisis occurs.** That should be undertaken by the individual with overall company response responsibility (per the crisis manual). At such a meeting, which may well be in the middle of the night, key issues must be resolved promptly and wisely: What is the extent of the damage and to whom? What outside assistance (medical,

legal, public relations) is needed? What parts of the crisis were not anticipated in the manual, and who is responsible for the corporate response thereto? In the immediate wake of such a meeting, instructions should be distributed to all involved personnel, announcing the decisions made and the time constraints upon their implementation.

■ **Secure a review by the corporate general counsel or his/her designee of the potential for legal liability as well as the steps to prevent litigation and reduce the costs of settlements.**

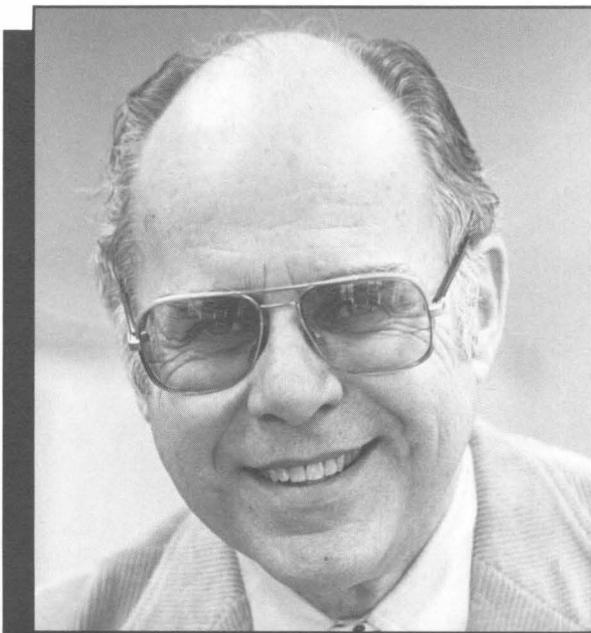
Simultaneously, your senior government relations officer should undertake a similar review to determine whether steps in addition to those in the manual are needed to address the concerns of federal and state legislators and regulators. The senior public relations officer should conduct an analogous review to determine whether additional steps are needed to inform and assure the media, employees, shareholders and consumer organizations.

■ **Finally, the chief executive officer should conduct a critique after the crisis has been resolved.** The critique's purpose is simple: How can we prevent a recurrence and, if there is one, how can we manage it better?

Some Common Denominators

Through both the preventive and corrective measures, certain common denominators will largely determine the company's success in managing its crisis. Those include: the full commitment of the chief executive officer to make the process work; the creation and preservation of a high degree of awareness of all senior management of the critical importance of effective prevention and corrective efforts; the identification and response to moral imperatives as well as legal obligations; and the creation of an adequate record of all critical events to provide the information needed either for litigation or for improving the corporate response to future crises. □

Richard A. Edwards is a professor of strategic management and organization and holds the Kappel Chair in Business and Government at the University of Minnesota School of Management.



Wise strategists plan for crisis

by Richard A. Edwards

It's hard to imagine why a person would poison over-the-counter medicine or Halloween candy, or otherwise try to cause death or severe illness to a random public.

But such people do exist. Thus, management must consider the right and wrong ways to respond to such a crisis. Ironically, if handled well, such a situation sometimes turns into a business opportunity.

The Johnson and Johnson response to the Tylenol disaster is a classic illustration of the opportunity provided by a crisis when managed with a high level of excellence.

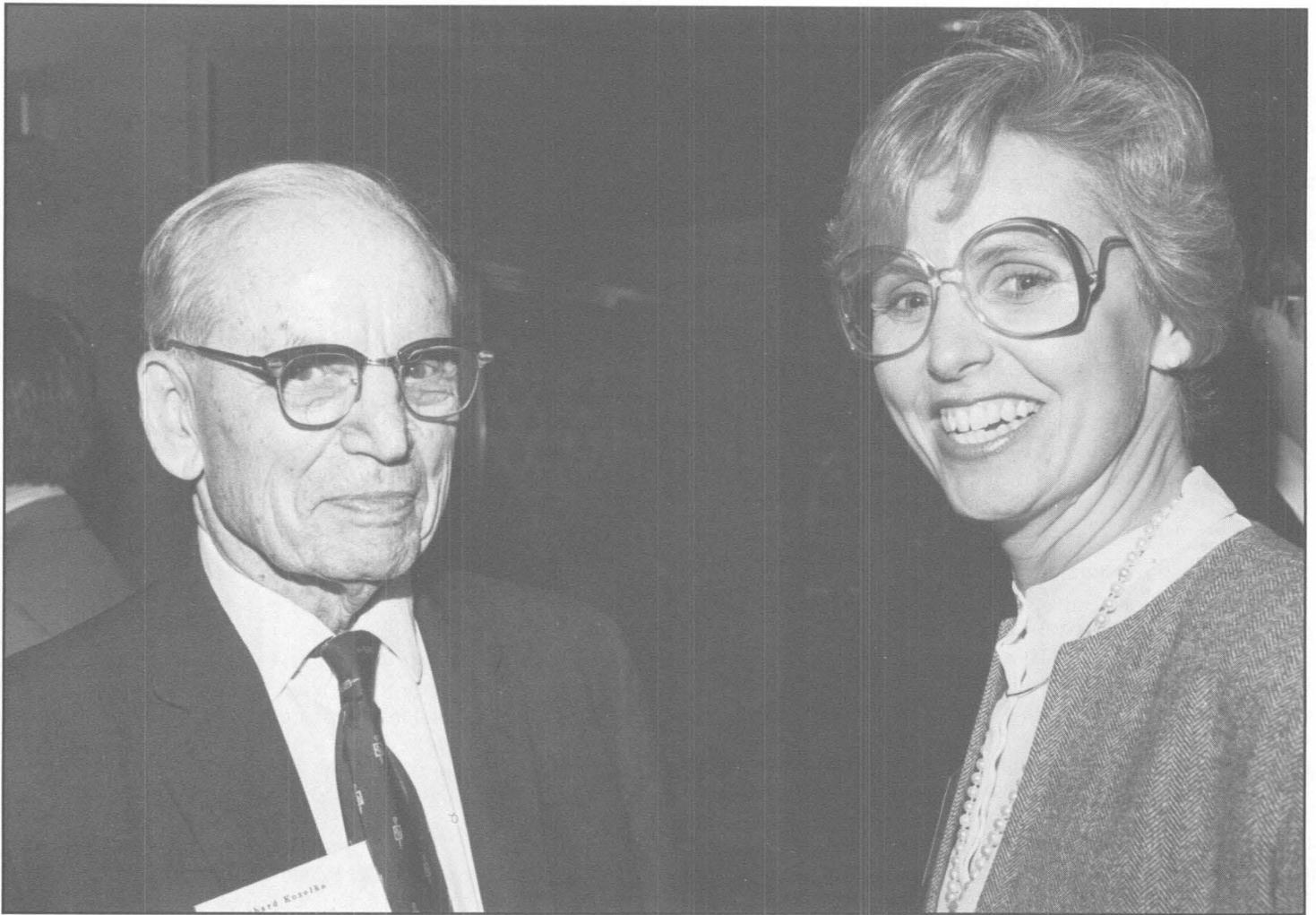
The overall crisis, from the time of the multiple deaths caused by some person or persons injecting a lethal substance into some Tylenol bottles, to the crisis resolution that achieved public and media acclaim for the corporation, was about 16 months. And, while steps taken by the company during that period cannot be viewed as a blueprint for any company transforming any disaster into success, they do offer managers an important and useful lesson. However, the nature of the product, the source of its contamination, the extent of adverse effects upon the consumer and many other variables make each case different.

It seems that Johnson and Johnson's first key decision was to recall all Tylenol from all distributors nationwide, and to provide consumer refunds as well as retailer reimbursement. Newspaper accounts indicate that that step alone cost Johnson and Johnson about \$300 million. But without such recall, there was no adequate assurance to the public of the company's commitment to contain the threat to public health. Furthermore, with Tylenol annual sales in excess of half a billion dollars and a 37 percent market share in a very competitive market, the company is reported to have received between 15 percent and 20 percent of its profits from that one product.

That same market data doubtless contributed to Johnson and Johnson's second key decision—making an effort to rehabilitate public confidence in Tylenol rather than retiring that product and offering a similar new product.

Finally, Johnson and Johnson's success in recapturing public confidence and thereby the market share of one of its key products came about by what basketball fans call an "all-court press." The company's chief executive officer appeared on two of the nation's most popular television programs, "Donahue" and "Sixty Minutes;" the company's entire sales force called upon retailers and the medical community to explain plans for the reintroduction of Tylenol to the market; about 600 journalists attended a 30-city satellite press conference. The company provided media representatives with a videotape describing the new tamper-resistant packaging, and distributed 7,500 press kits; and the public was made aware that from the Tylenol tragedy had emerged safer packaging for drugs manufactured by the entire industry.

Four years after the unsolved package tampering crisis, early in 1986 another death was attributed to poison injected into a Tylenol capsule. Johnson & Johnson responded promptly, and again, placed public safety and confidence above its financial advantage by voluntarily recalling all Tylenol capsules and providing reimbursement for consumers and distributors. The company also terminated all its non-prescription capsules because it could not guarantee adequate safety.



The late Richard Kozelka, former dean of the school, shared 50 years of experience and insight with Anne Benisch, associate dean for External Affairs, at the Alumni Reunion last fall.

Photo by Tim Rummelhoff

Alumni, students, friends remember Dean Richard Kozelka

School of Management faculty, administration, alumni, students and friends mourned the recent death of former School of Management Dean Richard L. Kozelka last November. His career as professor and dean at the University of Minnesota spanned 44 years.

As dean, Kozelka led the school through the last years of World War II and the years of large class enrollments following the War. He presided over substantial increases in faculty in the 1950s, and reorganized the school into departments of Business Administration and Economics, improving responses to changing business education needs. Upon leaving the deanship in 1960, he actively and enthusiastically resumed teaching. A keen observer and thoughtful analyst of the business scene and its professional needs, he also returned to the classroom as a student preparing for his full-time duties as a professor.

"Dick was the most devoted person to business education I've ever met," said colleague Albert Wickesberg, professor of management. Wickesberg added that Kozelka was the quintessential diplomat, "always open to the many and varied factions that helped shape school policy and programs."

A graduate of Beloit College, Beloit Wis., Kozelka was a lieutenant in the U.S. Army during World War I. After obtaining an MA degree from the University of Chicago, he came to Minnesota in 1923 as an instructor and graduate student. He received

his Ph.D. degree in 1931, majoring in statistics and economics.

Upon retiring from the University of Minnesota, he became director of graduate studies at the University of South Florida from 1967 to 1970. He returned to the Twin Cities in 1970 to serve for one year as interim president of the United Theological Seminary of the Twin Cities.

Kozelka was active in many professional organizations and maintained an active interest and commitment to education and service throughout his life. He was president of the American Association of Collegiate Schools of Business (AACSB), the accrediting agency for schools of business nationwide, and president of the Midwest Economics Association. Wickesberg noted that Kozelka's role as president of the AACSB spoke to his deep sense of responsibility and of the respect paid him by his professional colleagues.

He was also active in Plymouth Congregational Church, serving as chairman of its board of trustees. He was active on the boards of several major corporations and in numerous community and service organizations. His lifelong commitment to the University of Minnesota and business education leadership was evident in his continuing attendance in School of Management courses well into his '80s.

He is survived by two sons and daughters-in-law, eight grandchildren, and two great-grandchildren. □

Have your cake and eat it too!

by Norman L. Chervany

MBAs are a common, highly visible, and expensive part of the management landscape. Their presence and value is frequently debated.

Therefore, I was not surprised at the intensity of a recent debate by local managers on MBAs. As part of the school's current review of our MBA program, we conducted three focus groups comprised of local company representatives. We asked them to focus on a question that's generated a surprising unanimity of opinion from a highly diversified group:

"What knowledge, skills and attitudes should graduates of an MBA program possess?"

I would summarize the essence of their recommendations as follows:

- "breadth of perspective"
- "sensitivity to people issues"
- "technical soundness"
- "ability to communicate"

We hear again and again that communication - both written and oral - is a shortcoming of today's graduates. This is a very legitimate criticism. But, its solution is not the key to producing a good MBA graduate. Given an effective communication skills program, the key to developing productive MBAs lies in an appropriate curricular balance in the other three areas.

Technical soundness does not need much elaboration. MBA graduates need to be able to use microcomputers, do present value calculations, structure risk analysis studies, and, in general, use the myriad of techniques that have become part of "modern management." Moreover, employers expect MBA grads to be experts in a specific area like marketing research or systems analysis and design. The problem, maintain most critics, is that MBA programs stress technical and speciality material at the expense of "other things." The criticism is that MBA programs impart technical and specialist "myopia" in their graduates.

The desire for breadth of perspective is a reaction to the concern about technical and specialty myopia. As reflected in quotes by some focus group participants, this concern takes many forms:

"It's more important to teach finance as a part of the business context or to teach business that has financial overtones than to teach strong specific finance skills."

"We'll train them (in the technical areas). We want a broad background."

"If we're trying to run business with a lot more power at the bottom, to encourage people to cross lines between departments, an MBA program needs to do the same. There's an analogy between business and education: in a business organization we try to bridge the functional areas; MBA programs need to bridge the departmental areas."

"It's not banking anymore, it's financial services."

And with respect to international issues:

"Every MBA must have a pretty good exposure to international considerations. Argentina effects Babbitt."

The implication of these comments is clear - an MBA program should aim at graduating "business persons" not functional specialists.

Hand-in-hand with the concern for breadth of perspective is concern for "sensitivity to people issues." Critics say that the emphasis on technical skills may lead MBA graduates to rely too much on technical elegance as the key to successful actions.

Again, the quotes sum it up:

"The real success stories are MBAs who have human resource skills, those who give others the tools they need to do the job."

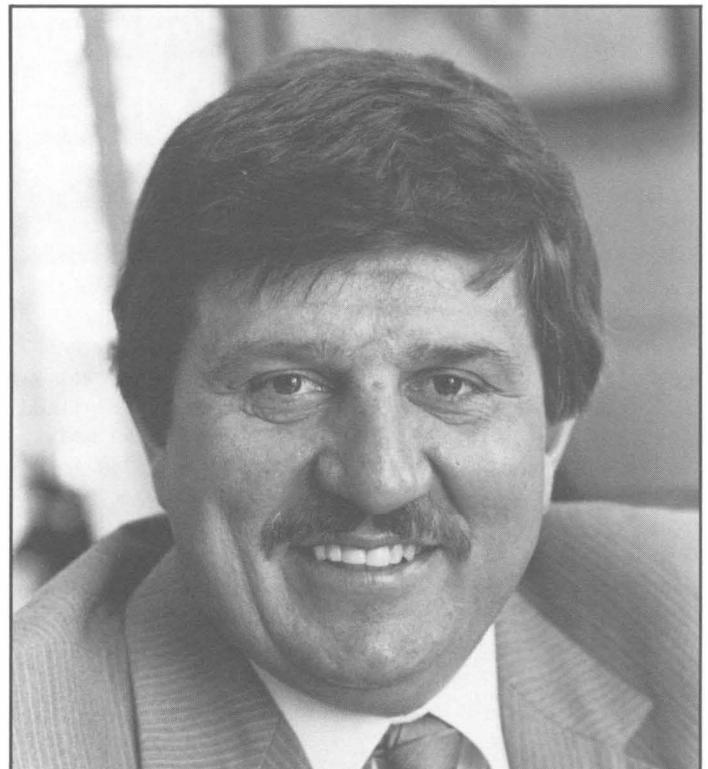
"MBAs must be led to understand the importance of the lower ranks of people and how they - the MBAs - are supported by these people."

"Technical training leads to narrow, focused vision. After I received my MBA I went through what I now recognize as the 'MBA axe murderer syndrome.' I charged straight ahead and left arms, legs, and heads along the way."

The implication of these comments is also clear - MBA programs must instill an understanding of the human element in their graduates.

"Balance" is the operational word in designing an MBA curriculum. Ideally, we all would like MBA graduates to have state-of-the-art technical skills, extensive exposure to all the varied facets of management, and finely-honed people skills. As one group participant said, "Of course, we'd like to have our cake and eat it too!" But, the world is not that ideal. In reality MBA programs have tended to become imbalanced—a little too much technical and specialty knowledge at the expense of breadth and people skills. Recognition of the imbalance is our first step in designing a more timely and effective MBA program. □

Norman L. Chervany is professor of management sciences and director of professional management programs at the University of Minnesota School of Management.



Commencement:

Dayton encourages service, commitment to Minnesota

Service was the watchword when Minnesota Energy and Economic Development Commissioner Mark Dayton addressed 130 School of Management baccalaureate degree candidates last December. Calling on his own personal and professional background, Dayton stressed the importance of serving company/customer, community, nation/world, and self.

Service to company and customer is critical, Dayton said, noting that Dayton Hudson, the company his family founded, has a reputation for quality based on that commitment. " 'The customer is always right' was coined or borrowed by my grandfather. It's absurd to think of that phrase always holding true," he said, "but a good manager must think that way because the customer certainly does."

Set your sights high, he advised, noting that his father, when asked how it felt to have Dayton Hudson pass the \$1 million mark, said he wouldn't be satisfied until it was a \$5 million company. "If you meet all your goals, you haven't set them high enough," Dayton told the graduates.

Service to community is equally important, according to Dayton. He called Minnesota special in its corporate commitment to quality of environment, citing the "Five Percent Club" whose corporate members contribute five percent of before-tax profit to state arts, education and other non-profit and social service organizations. But, Dayton stressed, community service goes beyond the financial donation. "Find a cause and get involved," he suggested. "The benefits for both sides are many. The organizations

get management expertise. Businesses get a different perspective."

Dayton emphasized the importance of today's business/government partnership, encouraging graduates to serve their nation and world through involvement in the political process and political parties. Don't stand by and let important government roles be filled by others of lesser quality and lower influence, he advised. "Help make the majority the thinking majority."

Last, but certainly not least, Dayton underscored service to self. Service to self is really the beginning, he said, encouraging graduates to eat right, exercise, and develop outside relationships and interests. "Overtime takes its toll," he reminded graduates, recalling the popular adage, "You can't help others if you're not well yourself."

He encouraged graduates to cultivate and know strong personal values. "You'll be faced with ethical considerations involving issues like hostile takeovers, greenmailing and plant closings that may conflict with your value system. You must be able to depend on yourself to make the best decision."

Finally, Dayton strongly encouraged graduates to remain in Minnesota and help strengthen the state's economy. "The state has made a strong contribution to your education. You have a choice, but there are so many opportunities right here," he said, citing Minnesota's 17 *Fortune* 500 companies, 14 companies on *INC* magazine's list of fastest growing national companies, and 100,000 plus small businesses. □

BSB degree 52-years-in-the-making highlights ceremonies

Determination, drive, and dedication propel the college careers of most management undergraduates. Those characteristics were underscored as featured commencement speaker Mark Dayton, Minnesota commissioner of economic development, and School of Management baccalaureate degree candidates witnessed a BSB degree 52 years in the making at ceremonies last December.

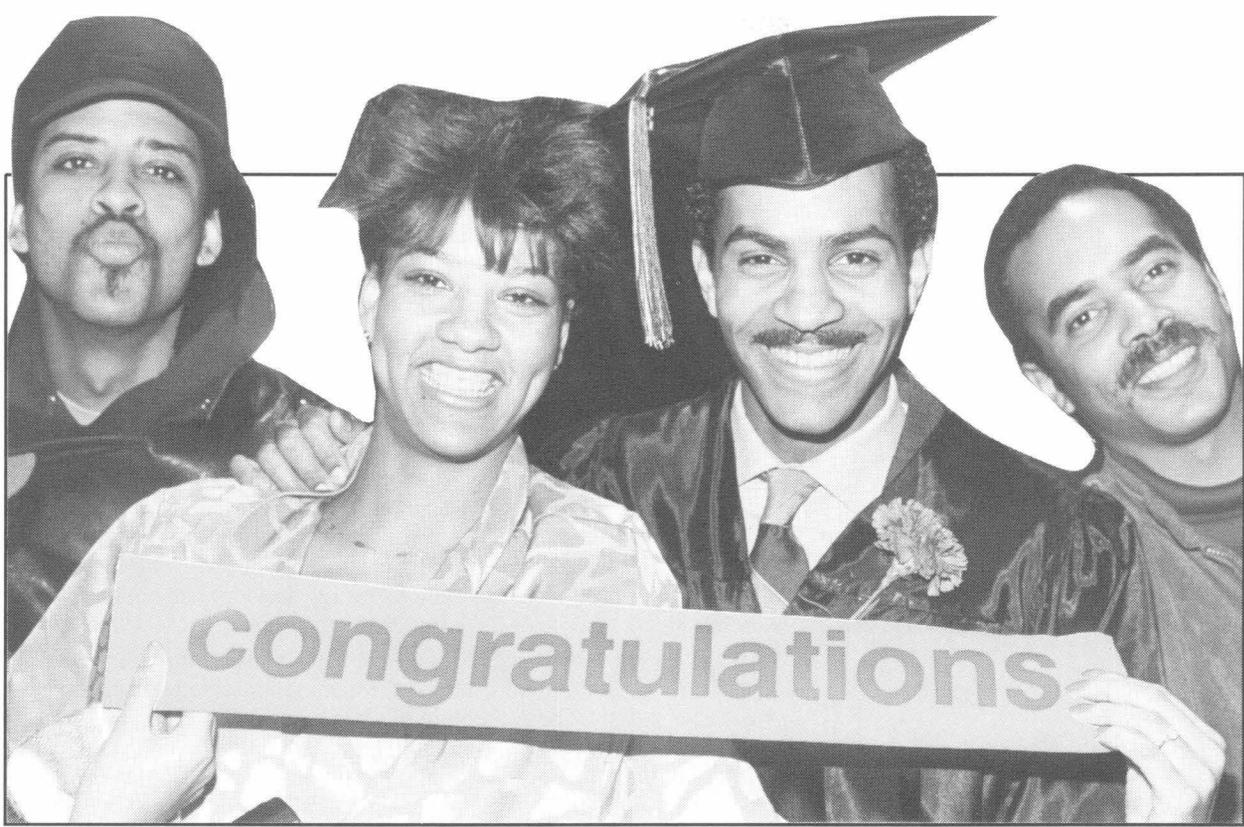
Seventy-six-year-old Jack Collins was the star of the day when he received the BSB degree that began when he entered the University's business program in 1927. Collins who was in and out of school for four years, completed almost all the degree requirements before leaving the University in 1933, the year he "should have graduated." At the strong urgings of his "well educated" family and friends, Collins returned to the School of Management fall quarter 1985 to complete the three credits to secure his BSB.

"Anyone can see the obstacles," Collins told fellow graduates. "But in the words of poet Edgar Guest, 'Somebody said that it couldn't be done, but he with a chuckle replied, that maybe it

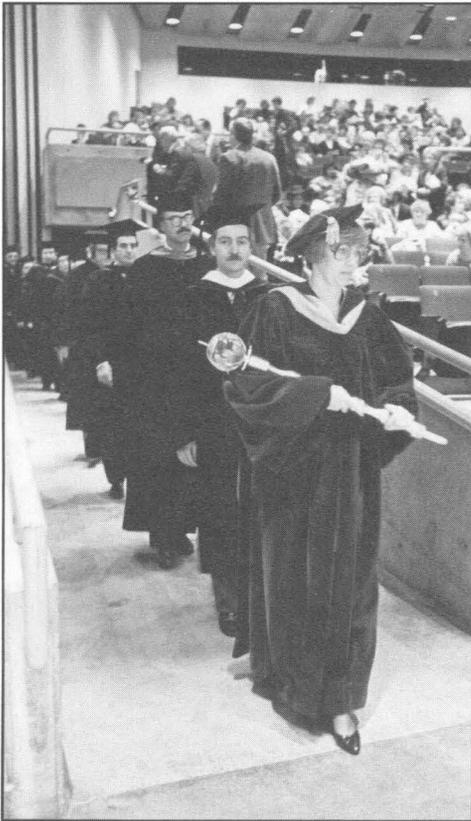
couldn't, but he would be one, who wouldn't say so, until he had tried. So, with the tilt of his chin, and a bit of a grin, he started to sing, as he tackled the thing, it couldn't be done, and he did it."

"Today, we're facing the best times of our lives," Collins said, comparing the economies of 1933 and 1985. He reminisced about the Works Progress Administration, bank closings and Civilian Conservation Corps of the Great Depression. "We made our own jobs since there were none available," he recalled. Collins described how he successfully sold himself as a bookkeeper to a firm, only to lose the job when his advice to cut overhead resulted in their deciding to do their own books.

After escaping his native Soviet Union in 1909, Collins came to St. Paul, Minn. in 1919. He performed a variety of jobs upon leaving the University in 1933, including boxing and silent movie acting. Since 1950, he's been with Palm Beach Beauty Products, Minneapolis, most recently as a sales manager. □



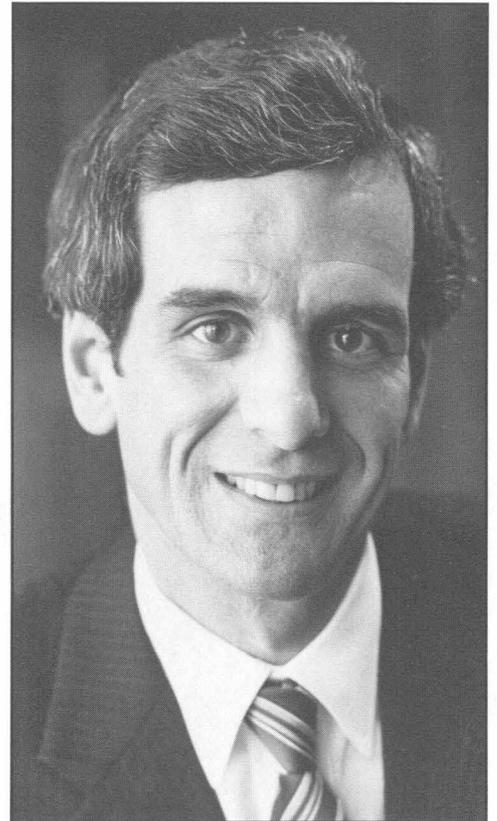
One word and a collection of smiles say it all.



Associate Dean for External Affairs Anne Benisch leads the commencement processional that includes 130 baccalaureate candidates and representative deans, faculty and administrators.

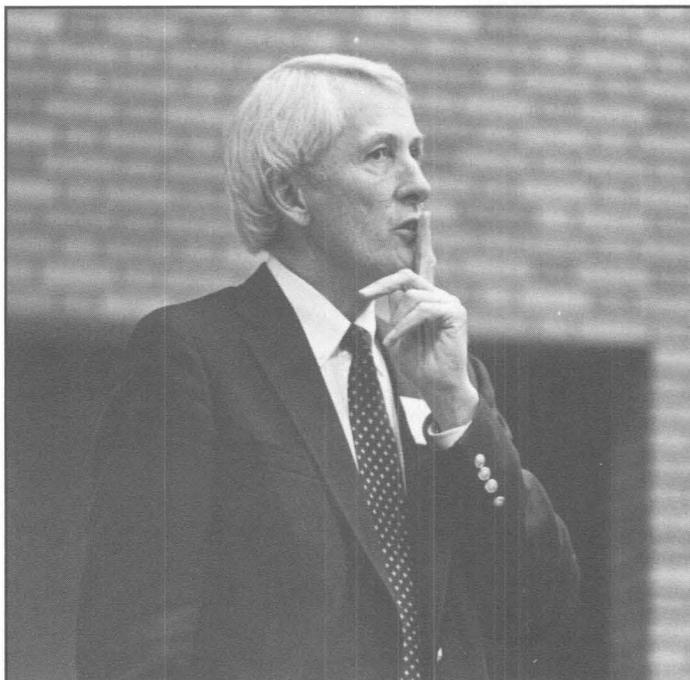


Seventy-six-year-old Jack Collins is all smiles after receiving his BSB that was 52 years in the making.



Mark Dayton

Photos by Tim Rummelhoff



Gene Steele, manager-Contributions for 3M, presented "The Job Outlook - 1985-86."



Susan Tomita joins almost 200 graduate students who examined the skills and strategies necessary to successfully launch a management job search.

Looking for work?

Job Search Workshop gives MBAs, MA-IRs a head start on the hunt

Almost 200 School of Management students got a head start taking self assessment, writing resumes and application letters, and preparing for job interviews when they attended the annual Job Search Strategy Workshop last fall.

The three-day workshop, sponsored by the Office of Career Planning and Placement, was designed to help MBAs and MA-IRs prepare for their upcoming job search. Company representatives, faculty and alumni helped participants identify the skills and strategies necessary to successfully launch a job search in their given management area. Banking, entrepreneurship, merchandising, manufacturing, services and nonprofit were just some of the specializations represented.

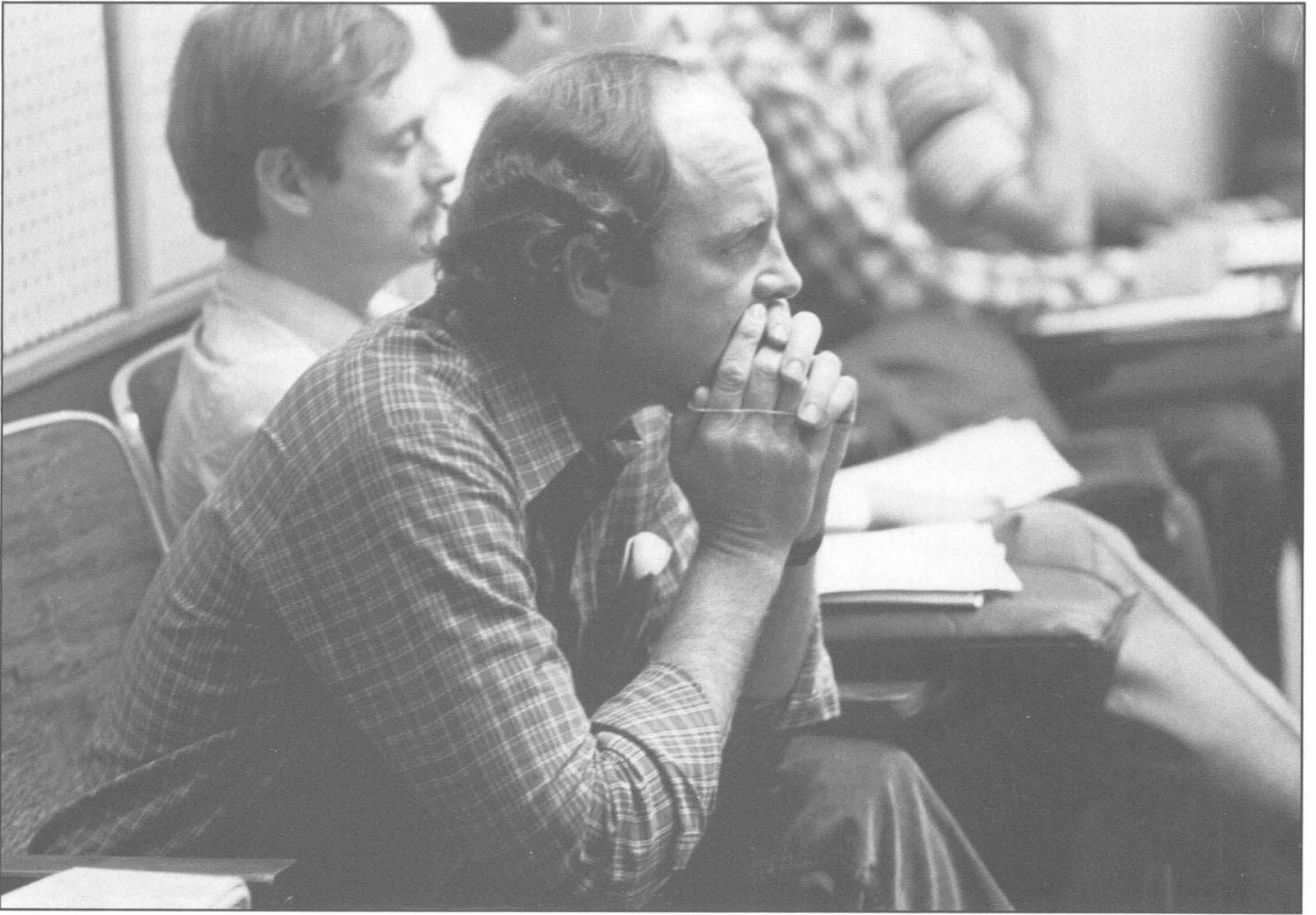
Dr. David Williamson, '59, minister of pastoral counseling, Colonial Church of Edina, Minn., opened the workshop with "The Adventure of Opening Doors." An expert panel then explored job search strategies. Panel members included Wende Jenson Farrow, '85, manager, Human Resources and College Relations, IDS; Mark Van Buesekom, regional recruiting administrator, McGladrey, Hendrickson & Pullen; and Ken Dobson, director, Human Resources, Gelco Corp.

David Wondra, '83, personnel supervisor, The Pillsbury Co., explored "The Whys and Hows of Self Assessment." He was followed by another expert panel comprised of Gary McGrath, director, Career Planning and Placement, U of M College of Liberal Arts; David Magy, '79, manager, Staffing and EEO, Honeywell, Inc.; and Sue Grafton, '81, senior research analyst, The Pillsbury Co.

A variety of mini workshops were led by local practitioners. Topics included: Two Career Families; Mentoring; Finding a Job in Another Location; Developing a Network, Nonprofit Service—Advantages to Your Career; and The Older-Than-Average Student and the Job Search.

Mock interviews were a workshop highlight. Alumni practitioners role-played with the students, helping develop confidence and skills to better handle the "real-world" situation. Interviews were videotaped and critiqued by practitioners and school communications staff. Gene Steele, manager-Contributions Programs, 3M, closed the workshop with "The Job Outlook—1985-86."

The Job Search Strategy Workshop was expanded from one to three days to provide students a much more comprehensive look at developing job strategy. "The job market grows more competitive all the time," noted Jan Windmeier, director of the Office of Career Planning and Placement, "we're delighted to give our students an edge in seeking employment." □



David Fink (foreground) and Richard Meyer listen intently to the ins and outs of preparing for the effective job interview.

Photos by Tim Rummelhoff



MBA student Therese Earl (left) and Barb Nemecek, Masters coordinator for the school, ask keynote speaker Dr. David Williamson, '59, to expand on "The Adventure of Opening Doors."



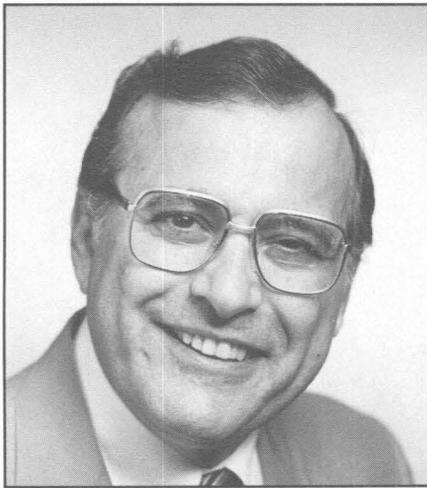
(Left to right) Ken Dobson, director-Human Resources, Gelco Corporation; Wende Jenson Farrow, '85, manager-Human Resources and College Relations, IDS; Mark Van Beusekom, regional recruiting administrator, McGladrey, Hendrickson & Pullen; and Jan Windmeier, director, Office of Career Planning and Placement, School of Management, lead a special panel on job search strategies.

Faculty News

New Appointments

Dennis A. Ahlburg, assistant professor of industrial relations, was invited by the Social Research Council to participate in a workshop to propose a feasible research agenda for the Bureau of the Census' Survey of Income and Program Participation.

Mario Bognanno, professor and chair of industrial relations, is chairing the Governor's Task Force on Unemployment Insurance.



Mario Bognanno

Robert (Bert) Burwell, Jr., former chief financial officer at Fairview Ridges Hospital, was appointed controller for the school.

Clare Foley, formerly of Resume Consultants, Inc., Minneapolis, is interim masters' coordinator in the Placement and Career Planning Office. She replaces Barb Nemecek who is on leave to complete her Ph.D.

Doug Lund, formerly with the West Bank Computer Center, was appointed coordinator/assistant education specialist in management sciences. He administers the MIS modules and provides technical support for the department.

David Naumann, associate professor of management sciences, was appointed chair of the Academic Computing Advisory Committee. **Gordon Duke**, assistant professor of accounting, will also represent the school on this committee which will work toward improved computing services throughout the University.

Mary Lippitt Nichols, associate professor of strategic management and organization, was appointed faculty director of the Executive Development Center's Minnesota Management Academy.

Akshay Rao was hired as an assistant professor in marketing and business law. He plans to complete his Ph.D. this summer at Virginia Polytechnic Institute and State University and join the department next fall.

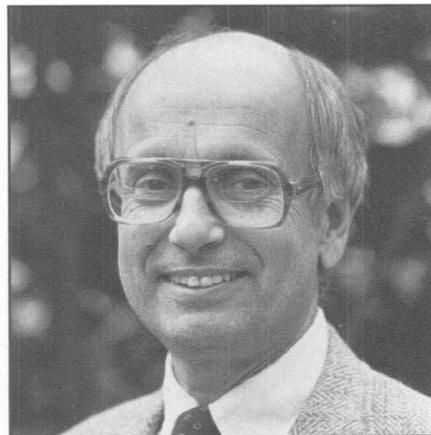
Peter Ring, associate professor of strategic management and organization, was appointed chair of the Citizen's Commission on Future Planning for the Minneapolis Police Department.

New Grants

Honeywell to the **Industrial Relations Center** to kick off their endowed chair drive.

IBM to **Paul Johnson**, director of the Ph.D. Office and professor of management sciences, to support his research in knowledge engineering and expert systems. Johnson also received a 3M grant of a computer workstation for similar research.

Bush Foundation to **John Mauriel**, associate professor of management sciences, to train 75 school superintendents in the Bush Public School Executive Fellows Program.



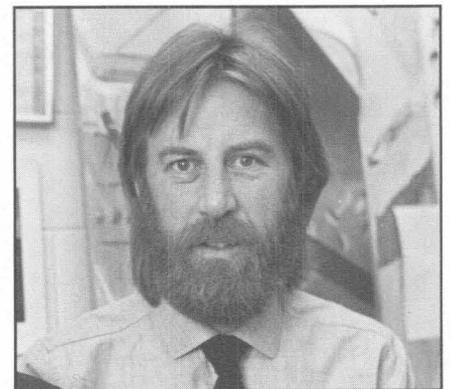
John Mauriel

University of Minnesota Microelectronics and Information Sciences Center to **Paul Johnson**, director of the Ph.D. Office and professor of management sciences, and James Slagle and William Thompson, Department of Computer Science, for research on intelligence systems.

Index Technology Corporation grant of computer software to team of **MIS faculty** led by David Naumann, associate professor of management sciences, for use in graduate MIS courses.

Publications and Activities

Dennis A. Ahlburg, assistant professor of industrial relations: "A Relative Cohort Size Forecasting Model of Canadian Total Live Births," *Social Biology*, Vol. 32, 1985. "Increased Penalty Rates for Overtime Hours: The Potential for Job Creation in Australia" (with **Paul L. Schumann**, assistant professor of industrial relations), *Journal of Industrial Relations*, June 1986.



Dennis Ahlburg

Richard D. Arvey, professor of industrial relations: "Statistical Power of Training Evaluation Designs" (with David Cole, Joy Hazucha, and Frans Hartanto), *Personnel Psychology*, autumn 1985. "Reliability Artifacts in Comparable Worth Procedures" (with Scott Maxwell and Lauren Abrahams), *Journal of Applied Psychology*, Vol. 70, 1985.

P. George Benson, associate professor of management sciences: "Classifying Sensory Inspectors with Heterogeneous Inspection-Error Probabilities" (with Hiroshi Ohta), accepted for publication in the *Journal of Quality Technology*.

Philip Bromiley, assistant professor of strategic management and organization: *Corporate Capital Investment: A Behavioral Approach*, Cambridge University Press, expected May 1986. "Corporate Planning and Capital Investment," accepted for publication in the *Journal of Economic Behavior and Organization*. "Planning Systems in Large Organizations: A Garbage Can Approach with Application to Defense PPBS," forth-

CENTERLINE

NEWS AND NOTES FROM THE RESEARCH CENTERS

WINTER 1986

Corporate PAC strategy revealed

SMRC

A Strategic Management Research Center (SMRC) discussion paper on political action committee (PAC) strategy has won a prestigious national Academy of Management (AM) award. "A Model of Corporate PAC Strategy," by Ian Maitland, associate professor of strategic management, and Dong Soo Park, School of Management doctoral graduate and associate professor at Yeungnam University in Gyongson, Korea, won the Social Issues in Management Division's best paper award at the AM's meeting in San Diego last summer.

The paper examines why some corporate Political Action Committees (PACs) pursue essentially "pragmatic" contribution strategies (above average contributions to Democrats, incumbents, and candidates in safe districts), while others choose "ideological" strategies (supporting Republicans, challengers, and candidates in close races).

Based on an analysis of PAC contributions of "Fortune 500" companies for the 1978, 1980 and 1982 elections, Maitland's and Park's research identifies two factors associated with a pragmatic PAC strategy. "The first is a firm's importance in its industry," Maitland explained, "the larger firms are more pragmatic." The second factor is the degree to which a firm's fortunes are affected by firm-specific (or at least highly focused) govern-



ment policies. It is measured by share of a firm's revenues derived from federal prime contracts, he added.

This pattern of corporate PAC behavior reveals several important findings, Maitland said. It shows that an ideological strategy (trying to influence the election outcome rather than gain access to legislators) is a luxury generally afforded only those firms relatively insulated from politics. That is because they are too small to serve as industry spokesmen, and/or too small to have the political resources to influence legislation, Maitland explained, and/or they are not highly dependent on specific congressional actions of limited scope.

Conversely, larger firms intent on protecting the interests of their industries,

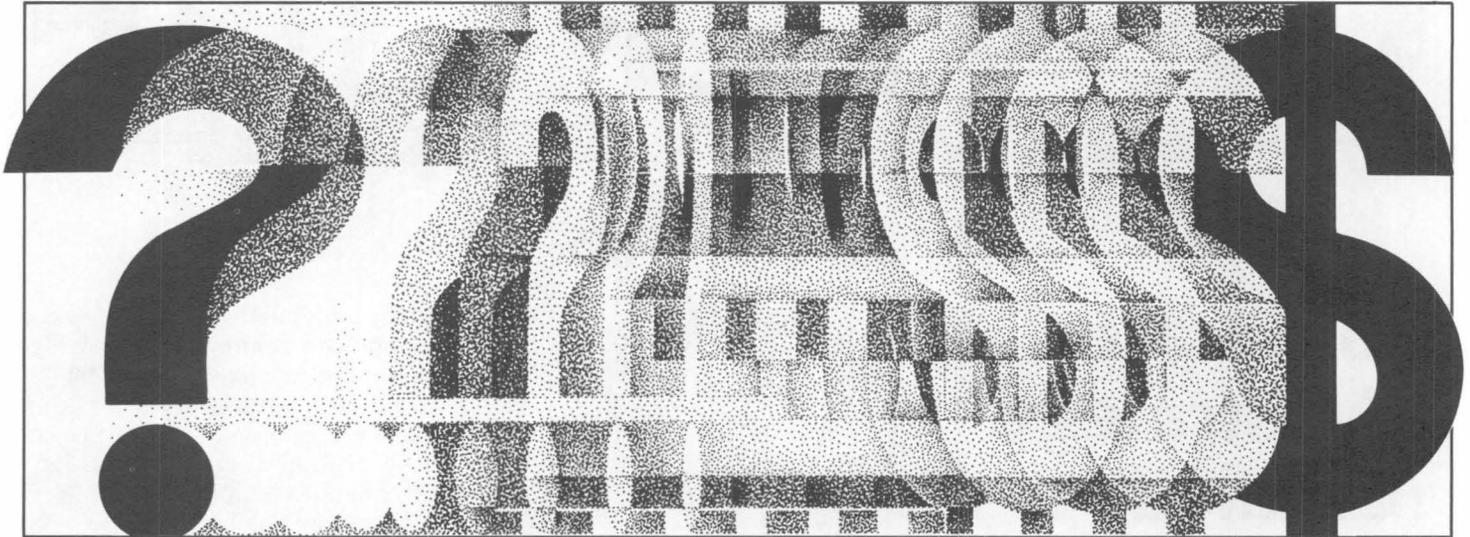
or any firms interested in congressional actions with a narrow impact, are highly vulnerable to reprisals from angry incumbents, Maitland said. Consequently, they play it safe. "As one company explained its PAC's decision to contribute to both candidates, 'We like (Republican Challenger) Cleve (Benedict) a bit more but (Sen. Robert) Byrd's got the longest memory in Washington.'"

This finding supports that each political party will attract more corporate PAC support by doing what comes naturally. For example, as the Democrats step up government intervention in the economy, they will create new opportunities for raising money from anxious corporate PAC managers. And as the Republicans deregulate the economy, they will free corporate PACs to vote their hearts, rather than their pocketbooks.

Copies of "A Model of Corporate PAC Strategy" (SMRC Discussion Paper #29) can be obtained by calling or writing the Strategic Management Research Center, University of Minnesota, School of Management, 271 19th Ave. S., Minneapolis, MN 55455, (612) 376-1502. ■

Announcing: CENTERLINE

CENTERLINE: News and Notes from the Research Centers is a new section designed to keep *Minnesota Management Review* readers up-to-date on the business/education partnership that characterizes the school. The section highlights the school's research centers which have been at the forefront of innovative design and delivery of service to scholars and practitioners for more than four decades. This issue features the Management Information Systems Research Center, Strategic Management Research Center, Industrial Relations Center and Accounting Research Center.



Gallium arsenide offers insight into innovation

How does a new technology get off the ground, become a product and eventually become implemented into a larger system?

Strategic management researchers are involved in a study of gallium arsenide that they hope will help answer those critically important management questions.

Gallium arsenide is a compound material with potential use in the fabrication of very high speed integrated circuits. It has been the subject of intense academic interest for more than three decades. Recently, industrialists, who have long favored silicon, have shown an interest in gallium arsenide.

Since the late 1970s, more than 50 worldwide firms have been exploring gallium arsenide's potential use in supercomputers and communication systems, hoping to use it by the end of this decade.

The Strategic Management Research Center (SMRC) conducted an initial survey of gallium arsenide project managers in 45 firms in the United States, Japan and Western Europe last year. The results, shared with those firms, identified the companies using gallium arsenide, and assessed to what extent those firms interacted with other organizations.

A second survey, now being conducted, examines more closely the kinds

of interrelationships between firms and how firms assess the importance of such interactions.

"The rise of gallium arsenide from beneath the shadow of silicon is, in essence, a story about how an innovative technology emerges in a world dominated by a widely accepted alternative technology," says Michael A. Rappa, project researcher and Ph.D. candidate in the school's department of strategic management.

SMRC

"Understanding the process by which a new technology is commercialized is what the project is all about," Rappa adds. "It is also about technological innovation."

Gallium arsenide is a complex and expensive technology to develop, Rappa says. Only the very largest firms have the financial resources and technical skills to work alone on its development. Therefore, firms must interact to achieve their individual goals in some mutual way.

"Seldom is one firm solely capable of bringing a new technology to market," Rappa says. "When a new technology emerges, there are a number of problems which developers have to overcome. For example, developing the fastest integrated circuits requires the

simultaneous development of the fastest testers to test them."

Rappa and co-investigator Andrew Van de Ven, 3M chair for human systems management and SMRC director, hope that findings can be generalized and applied to innovation in other industries.

Rappa became interested in the semiconductor industry during a three-month internship in Japan, studying industrial organization and finance. He presented a paper on capital financing in the semiconductor industry at the second annual Pan Pacific Conference for Business, Economic and Technological Exchange in Seoul, Korea last spring. He also wrote "Capital Financing Strategies of the Japanese Semiconductor Industry," published in the *California Management Review* last winter.

He was recently named a 1985-86 recipient of the School of Management dissertation fellowship. Rappa's current research is jointly funded by grants from the McKnight Foundation, IBM Corporation, and the SMRC. ■

Birds, baseball and Reverend Bayes:

How to train an auditor

by Shyam Sunder

Auditors do not begin checking an organization's accounts and reports with a blank slate.

Auditors usually know a lot about an organization's history, people and current conditions. When they find something unusual or wrong during their check of accounts, they combine this information with their prior knowledge to decide what to do. The statistical procedure for combining prior knowledge with new data is called "Bayes' Rule" after the Rev. Thomas Bayes who proved the theorem in the 18th century.

For example, an auditor may know from previous experience that on average, 10 percent of the inventory accounts have errors, and that for 95 percent of the organizations the error rate falls between 14 and six percent. Upon checking 100 randomly selected inventory accounts of an organization, the auditor finds errors in five. Bayes' Rule allows the auditor to place partial reliance on his previous experience (10 percent error rate) and partial reliance on the evidence gathered (five percent error rate) to yield an estimated 8.5 percent as the most likely rate of error in the organization's inventory accounts. Furthermore, the auditor can have 95 percent confidence that the error rate in these accounts falls between 5.5 and 11.5 percent. Having optimally combined information from both sources, the auditor is better equipped to chart the further course of audit.

How good are we at intuitively using the Bayes' Rule in our day-to-day affairs? Formal use of Bayes' Rule often requires complicated arithmetic calculation. Even those who have the necessary arithmetic skills may not know the Rule. Perhaps we should not expect most of us to be very good at intuitively using Bayes' Rule. But then, few baseball or pool players have intimate knowledge of Newton's Laws of Motion. Through repetition and practice, they make up for their inability to solve the relevant differential equations. In fact, they do so well that few physicists can match their skills.

Whether people can learn to use Bayes' Rule intuitively and without formal arithmetic calculation is an important question for training and educating auditors and many other professionals. If they have the ability to learn, what conditions facilitate such learning? Currently, we have no theory to help answer these questions. We, and others before us, have therefore resorted to empirical investigation—try and see what happens.

ACCOUNTING RESEARCH CENTER

Experiments conducted with people isolated from each other show that most people are not very good at using Bayes' Rule intuitively. They tend to place too much weight on what they immediately observe and too little on what they know from previous experience. Researchers have compiled convincing evidence that human beings are not genetically pre-programmed to be Bayesians the way birds and insects are genetically pre-programmed to fly.

But all hope is not yet lost. Man does learn to play ball, and can do so without conscious effort once learning has been accomplished. Couldn't the same hold true of Bayes' Rule? Learning is helped by reward and reinforcements. Perhaps there exist learning conditions where rewards and reinforcements are just enough that people can learn to become Bayesians intuitively.

A competitive market is one such possible environment. It financially rewards those who use Bayes' Rule. It also allows them to learn from their mistakes and correct themselves by observing the behavior of others. So Rong Ruey Duh, Ph.D. student in accounting, and I decided to find out if people can learn to be intuitively Bayesian when trading in a competitive market with real money.

The answer we have found so far is a weak yes. We have observed that the behavior of people is closer to Bayesian than other behavior models. However, it is not precisely Bayesian. Perhaps, conditions do exist where we can train peo-

ple to act as Bayesians without having to equip them with calculators, formulas and computers.

Questions of how people process information and how one might train auditors to conduct their work are of more than academic significance. The Auditing Standards Board, the auditing rule-making body of the American Institute of CPAs, recently split into two factions, popularly labelled "quantos" and "judgos." The "judgos" camp believes in man's innate ability to make judgments based on available data without using formal statistical sampling and inferential procedures. The "quantos" apparently do not have such faith in the

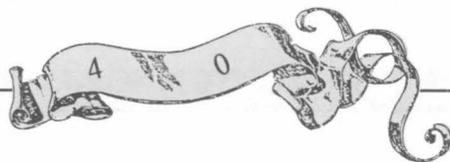
human computer and have pushed for a statistical formalization of the standard procedures of the audit profession.

The debate in the audit profession is not unique. The problem is more general and extends to many, if not all, professions. Many of the related issues are currently being investigated under the banner of artificial intelligence.

We presented our results at a University of Oklahoma conference last November. It was specially arranged to discuss this and other accounting research which use experimental economics methods. Many leading accountants and economists attended the conference. A volume of papers presented at the conference will be published in 1986.

The Dayton Hudson Foundation, the McKnight Foundation and the School of Management Accounting Research Center provided financial support for this research. Copies of the full report are available by writing to the Accounting Research Center for Rong Ruey Duh and Shyam Sunder, "Incentives, Learning and Processing of Information in a Market Environment: An Examination of the Base Rate Fallacy," University of Minnesota Accounting Research Center Working Paper No. 1985-5. ■

Shyam Sunder is the Honeywell Professor of Accounting at the University of Minnesota School of Management.



IRC commemorates 40 years of progress

Forty years ago, when it established the Industrial Relations Center, the University of Minnesota acknowledged the need for a new academic discipline—one which would investigate and explain behaviors and problems arising out of the employment relationship. The country had just completed a traumatic 15 years of social upheaval beginning with the Great Depression and ending with the allied victory in World War II.

The challenge was there, from both labor and management, to resolve the questions of how and why and under what conditions men and women work, and what makes them like their work.

So in 1945, industrial relations became established at the University of Minnesota, although its foundations were rooted in older, well established social sciences. Industrial relations brought together those traditional subjects—economics, psychology, history,

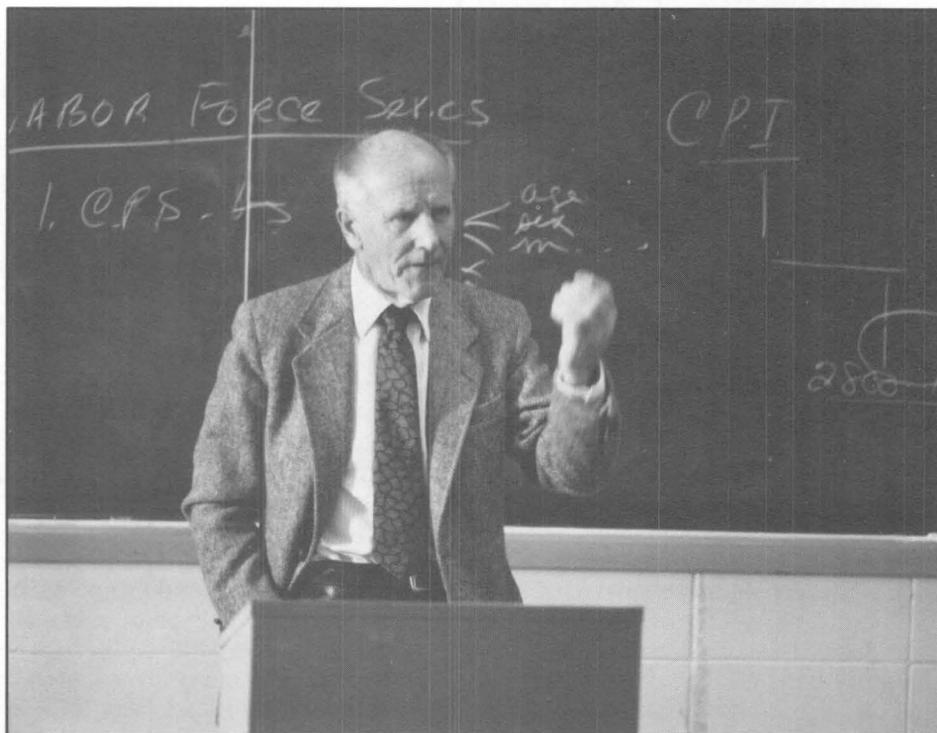


Sandy Fiechtner, MA-IR student and Professors Richard Arvey and Mahmood Zaidi discuss a class project.

law and sociology—for an interdisciplinary resolution to the problems of the world of work. The idea was a success, and today, the Center, which is a division within the School of Management, is ranked among the top three industrial relations programs in the nation.

The Industrial Relations Center grew out of necessity. Prescriptions for handling employee industrial relations problems had always been in great supply, but they were often based on whim, or hunch or prejudice. The Industrial

INDUSTRIAL RELATIONS CENTER



Dr. Rudy Pinola, director, IRC Policy Studies and Development Services, explains a concept at a faculty/staff workshop.

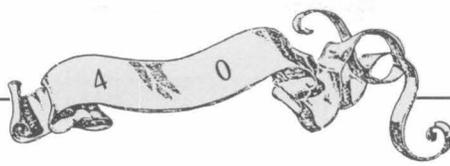
Relations Center was created to develop new knowledge about employment and avoid reliance on prescription. Its research charter led IRC members to develop and test theories, offer applications of the results to practitioners, and construct a body of knowledge to instruct students in the practice of industrial relations and human resource management.

Research, education and outreach. Since 1945, the Industrial Relations Center has been fulfilling its mission through those activities.

From the start, the Industrial Relations Center had its work cut out for it. In its early years it studied the problems of the changing work force. Women were leaving work and returning to the home, while men, who had been in the trenches, were replacing them. Men were also returning to the universities in record numbers under the GI bill. At the same time, many men, some wounded and maimed, were coping with the adjust-

"The challenge was there, from both labor and management, to resolve the questions of how and why and under what conditions men and women work, and what makes them like their work."

ments needed to return to work as civilians. For their parts, employers and unions had their own adjustments to make. Wages were open to free collective bargaining after a nearly five year hiatus during which labor-management relations had been regulated by the federal government and wages and prices had been frozen. Skill training, fringe benefits and government regulation in em-



ployment and labor relations were all areas which required research and new knowledge for practitioners.

Industrial problems are different today. The demographics have changed. Women are back in the work force, in record numbers, and so are minorities. The worker's expectations have changed too. Today's cohort of 30-to 40-year-olds, the baby boomers, are more highly educated than workers at any other time. They have grown up during an affluent period and they have high expectations. This new worker wants to know why personnel systems are the way they are, and industry has to be able to respond. Organizations are changing, too. Many are moving beyond national boundaries, affecting the questions posed by the industrial relations scholar.



Mike Bognanno, professor and chairman of industrial relations, Donna D'Andrea, administrator and Dave Estenson, program director, review progress on a major research project involving Northwestern Bell and the Communications Workers of America.

The impact of industrial reorganization, deregulation, civil rights, new technologies, changing demographics, innovations in fringe benefits and pay systems, and other changes on industrial relations have been dramatic.

But while the issues have changed in 40 years, the industrial relations approach is the same. Since 1945, the Industrial Relations Center has used its interdisciplinary strengths to scientifically study employment relationships. Through research, teaching and outreach, it continues to fulfill its mission and study the problems of labor and the management of human resources—whatever they may be. ■

Institute explores employment future, launches endowed chair drive

INDUSTRIAL RELATIONS CENTER

The University of Minnesota's impact on industrial relations and human resource management will have added thrust thanks to a \$150,000 gift from the Honeywell Foundation to the School of Management's Industrial Relations Center (IRC).

Honeywell's Vice President for Human Relations Fosten A. Boyle helped the IRC celebrate its 40th anniversary by presenting the gift at the IRC's Seventh Annual Industrial Relations Institute last October. "Work, The Worker and The Workplace...The Future of Industrial Relations" was the Institute's theme. It was cosponsored with the IR Alumni Society.

The IRC, a school division, is the unit through which the university's labor relations/human resource teaching, research and outreach activities are offered. The IRC also responds to labor and management education needs through a wide array of programs like its annual Labor-Management Symposia to increase cooperative dialogue between the two sectors. It also operates the Labor Education Service and Employer Education Service which offer professional development programs.

Honeywell's was the first major public gift to help the IRC fund an endowed land grant chair in industrial relations. The \$1.5 million chair will match \$750,000 from the Permanent University Fund with private gifts. The IRC will raise the remaining \$600,000. An honorary board comprised of prominent industrial relations/human resource executives and IRC alumni will lead fundraising efforts.

More than 500 people, including IRC alumni and faculty, and local personnel, union and government professionals attended October's Institute which commemorated 40 years of IRC success in transforming industrial relations (labor relations and personnel management) from a largely intuitive, often adversarial practice to an analytical and behavioral discipline. The Institute also identified future issues based on economics, regulation and public policy,

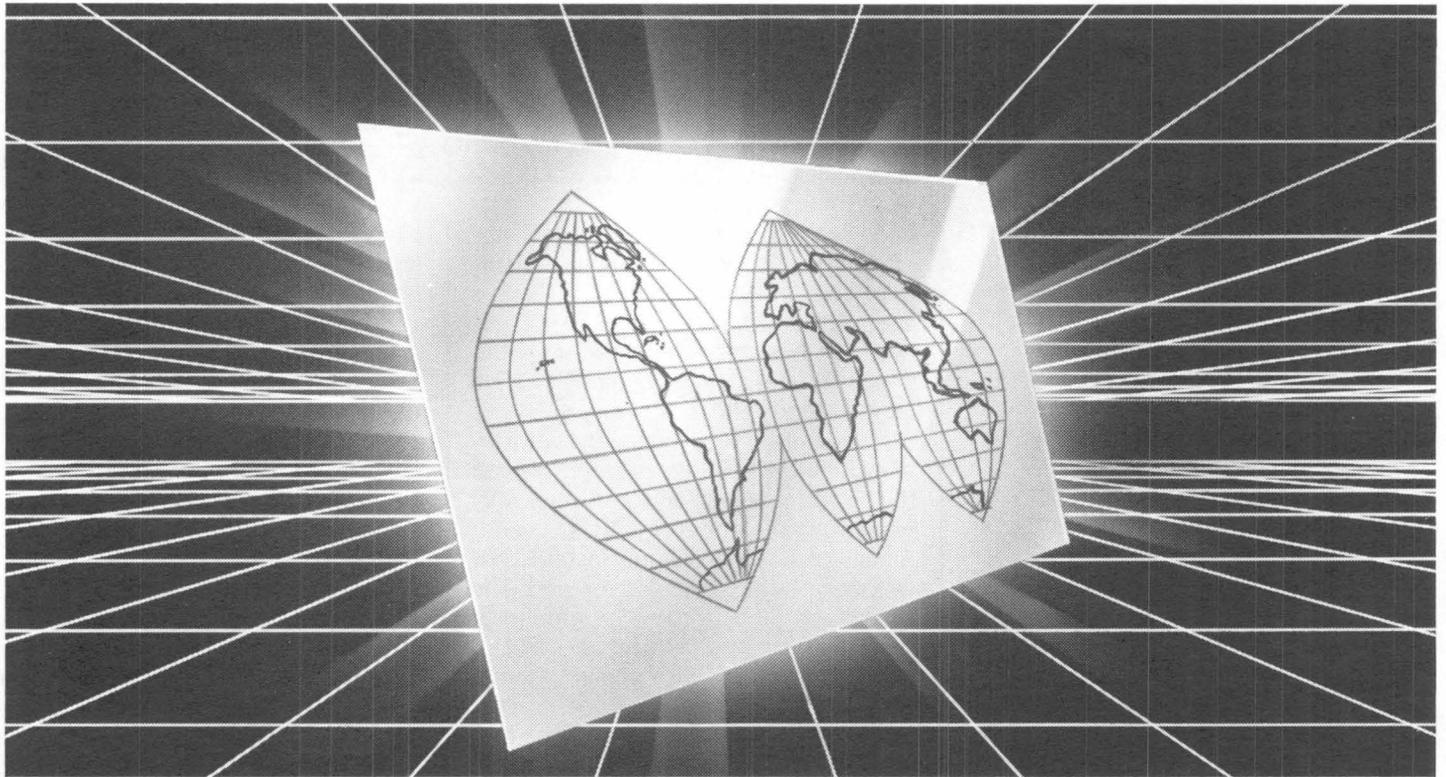
changing social and demographic forces, and the changing technologies that affect the workplace.

Herbert G. Heneman, Jr., professor emeritus and former IRC director, provided an historic overview, followed by the views of a diverse group of nationally recognized experts.

Barry Bluestone, professor of political economy and planning, Massachusetts Institute of Technology (MIT), discussed how shifts from manufacturing to services are affecting the American working class. Howard V. Knicely, vice president of Human Resources, TRW, commented on technological changes and how they are impacting worker retraining, collective bargaining and changing job responsibilities. Nicholas A. Ashford, associate professor of technology and policy, (MIT), predicted that worker health and safety issues will be as important to the late 20th and early 21st centuries as civil rights were to the mid-20th century. Employers must make accommodations for disease and handicaps that occur outside as well as inside the workplace, Ashford told participants.

The theme of increased service jobs was reiterated by Charles O'Reilly, III, associate professor of organizational behavior and industrial relations, University of California, Berkeley, and Audrey Freedman, senior research associate, The Conference Board. O'Reilly foresees increased care-giving jobs to meet the needs of America's aging population. Freedman, in her keynote address "The Worker—Meeting the Challenge of Change," talked about the "feminization" of the service industry as child- and aged-care related jobs shift from the home to the workplace.

"Distinguished Achievement Awards" were presented by the IR Alumni Society to IRC alumni John R. Duxbury, senior vice president, Human Resources, Rosemount, Inc., and Kenneth M. Hall, vice president, Personnel Resources, Tennant Co. ■



SMRC research probes international management issues

The Strategic Management Research Center (SMRC) recently initiated three international management research projects as part of the School's new international management research program.

One is an interdisciplinary proposal to the National Science Foundation to study the comparative advantages of political and competitive strategies in international management. The interdisciplinary team includes Stefanie Lenway (School of Management), Robert Kudrle (Humphrey Institute of Public Affairs), Harald von Witzke (Agricultural and Applied Economics), and Robert Hudec (School of Law).

Another SMRC international research project is titled "Human Capital and Multinationals." Researchers have collected data and are preparing working papers. The joint project, by Mahmood Zaidi (School of Management) and John Lawler (University of Illinois at Urbana), compares and contrasts the management of human resources and organizational development styles of U.S. and Japanese multinationals in Bangkok,

Thailand.

A third study, "Strategic Responses to International Political Risks," by School of Management Professors Lenway and Peter Ring, is newly underway with SMRC seed money support. The study will investigate the responses of Dresser Industries, Caterpillar Tractor, and General Electric to the trans-Siberian pipeline embargo imposed by President Reagan in 1982.

The SMRC's international management research program is directed by Mahmood Zaidi, who also directs international program development in the School of Management. "Research on international management issues, as well as development of an international curriculum and a faculty-student exchange program are a top priority," Zaidi said.

Zaidi has been meeting with international division managers and corporate executive officers of Twin Cities' multinationals, such as 3M, Honeywell, Control Data and Bemis Company, to determine what issues the SMRC might study.

Suggestions from corporate leaders include: the development and imple-

SMRC

mentation of global and regional strategies by multinational firms; human resources management issues of employment security versus employment-at-will; long-run versus short-run investment strategies; U.S. government tax and investment policies that affect international competition; and worldwide joint ventures.

Besides helping launch the SMRC international management research program, Zaidi helped finalize the School's international case study project. A major U.S. Dept. of Education grant funded the development of nine international case studies, based on real world management experience. Cases are being used in a variety of ways as the school builds a stronger international component throughout its educational programs. ■

MISRC: education, research and service

The Management Information Systems Research Center (MISRC) started in 1968 to facilitate research in the emerging MIS field and to promote a productive research relationship between the management information systems (MIS) practitioner and the academic community.

MISRC

The MISRC is a research component of the department of management sciences. Besides promoting school/community interaction, the MISRC addresses two other key functions. Participating scholars perform research that addresses current and future managerial use of computers. The Center also educates and develops MIS professionals and educators.

MISRC operations are supported, financially and personally, by participants of the Twin Cities management community, called associate firms. Center objectives are enhanced through seminars and workshops, working papers, discussion groups, research, internships, and training and development. The Center also publishes the *MIS Quarterly*, a leading MIS journal. A cumulative author and title index for the *MIS Quarterly* is available to the public.

MISRC seminars are held exclusively for the associate firms, management science faculty, and MIS Ph.D. students. Upcoming seminars include:

- March 13—"Helping Users Help IS," Robert Alloway, Alloway, Inc.
- March 27—"Breaking the Systems Development Bottleneck," Philip Pyburn, University of South Florida.
- April 10—Panel on "Information Architecture," James Brancheau, MISRC; Larry Schuster, Pillsbury; Rao Vellanki and Hane Carlson, Honeywell.
- May 8—"IBM Project for Management of Information Systems: A Status Report," Tom Hoffmann, Gordon Davis, and Gary Dickson, U of M, Management Sciences.

May 15—"The Management of Innovation," Andrew Van de Ven, U of M, Strategic Management.

Seminars meet 8 a.m. to 12 p.m. at the Minneapolis Hilton Inn.

The MISRC also offers a wide variety of working papers. New publications available to the public include:

- 86-01 An Investigation of the Information Center from the User's Perspective (J. Brancheau, D. Vogel, and J. Wetherbe).
- 86-02 Mainframe and Microcomputer-Based Business Graphics: What Satisfies Users? (J. Lehman, J. Van Wetering, and D. Vogel).
- 86-03 On the Effective Use of Fourth Generation Languages: A Man-

ager's Guide to Relational Database Design and Use (S. March, J. Carlis, and A. Flory).

86-04 A Survey of MIS Organizational Structures (C. Roger, D. Vogel, and J. Wetherbe).

86-05 The Functional Dependency Model: A Unified Approach to Information System Development (A. Flory and S. March).

86-06 Information Architecture: Methods and Practice (J. Brancheau and J. Wetherbe).

A complete list of all MISRC discussion papers is free to the public. Cost of papers is \$3. A MIS Faculty Directory with more than 1650 names from 450 colleges and universities is also available.

For more information on seminars, papers, publications or other MISRC-related items, call 373-7822. ■

STRATEGIC MANAGEMENT RESEARCH CENTER

SMRC addresses strategic problems of general managers

"An off-Broadway version of research ideas." That's what John Bryson calls the discussion paper series that he edits. The Strategic Management Research Center (SMRC) discussion paper series lets academics share and sharpen their ideas before they are published in scholarly journals.

The series is divided into three areas: 1) case studies for teaching and research; 2) theoretical and research papers for an academic audience; and 3) papers focusing on the practical application of research findings. Paper topics cover a wide variety of timely management issues, ranging from capital financing in the Japanese semiconductor industry to the technical change and innovation in agriculture to strategic planning in the public sector.

More than one-fourth of the papers in the series have already been accepted for publication in journals or books. However they are included in the series because the lag time between acceptance and publication is often quite long, Bryson notes. "This is a way of broadcasting their ideas before publication in a form that allows the paper

to be easily cited and more easily obtained," he says.

One purpose of the discussion paper series is to get ideas out early, so that they can be discussed and reflected upon before they reach a wider audience, says Bryson, who is also associate director of the SMRC. It is also a way of providing feedback to authors on their work in the early stages of development, he adds.

"Ideas are the only thing an academic owns," Bryson says. "With this discussion paper series, we help people sharpen their ideas, expand their influence and maintain credit."

The series includes more than 40 papers. A list of titles, as well as copies of the papers, are available by calling Susan McGuire, 376-1502. ■

STRATEGIC MANAGEMENT RESEARCH CENTER

Seed money encourages new SMRC research

The Strategic Management Research Center (SMRC) grants seed money to innovative research projects with potential for later outside funding. Five projects received seed money grants for the 1985-86 academic year. They are:

- Bank Market Structure, Performance, and the Supply of Financial Instruments—Jo Ann Paulson
- An Empirical Study of Principles for the Management of Successful Operations—Roger Schroeder
- Innovations in Safety Review at Nuclear Power Plants—Alfred Marcus
- Interdependence of Competitive and Political Strategies in International Strategic Management—Stefanie Lenway and Mahmood Zaidi
- Strategic Planning by Governments—John Bryson

"We have an especially strong set of seed money projects this year, and we hope they will broaden the SMRC's research program," said Rob King, director of the seed money grant program. The six-month to one-year grants may be used to cover expenses such as travel and research assistants' salaries.

The Center has identified six research areas critical to its research agenda. They are: innovation; economic development and small business startups; international management; strategic planning; mergers and acquisitions; organization performance.



Faculty from any University department may apply for a grant. Research must focus on the problems of general managers. "Interdisciplinary problems are especially encouraged," King says, "because one of the SMRC's purposes is to strengthen interdepartmental links."

For more information on the seed money program, contact Rob King at 376-2936. ■

Academics sharpen, share ideas with area practitioners

The Strategic Management Research Center (SMRC) engages in a very active set of research programs and outreach activities that address the strategic problems of general managers. Fifty-five faculty and doctoral students from 10 different university departments are engaged in 29 research projects within the Center. Research projects fit the Center's research agenda and focus on six major areas: managing innovation and change; economic development and new business start ups; international strategic management; managing mergers, acquisitions, and diversifications; strategic

Organizational themes are focus for the SMRC Colloquia Series

The 1985-86 Colloquia Series in Strategic Management is exploring three themes—theories of organizing, contexts of organizations, and making organizations better.

Series' speakers are drawn from the business and academic communities. The combination of academic and business contributions is an important feature of the series, says Peter Ring, series director. Each quarter Twin Cities' business leaders can discuss their experiences in strategic management with colloquia participants.

"By bringing in people from the business community, we're trying to broaden the perspective of people in

academe — and vice-versa," Ring says. "It also gives people in the business community the opportunity to listen to their own colleagues' perspectives on these issues."

The colloquia series is open to all SMRC associates and meets 10:15-11:15 a.m. in Room 15, Law School. Upcoming colloquia are as follows:

March 7 Phil Bromiley, University of Minnesota "Strategies, Budgets and Outcomes"

March 14 Reserved for practitioner

April 4 John Lawler, University of Illinois at Champaign "Multinational Human Resource Management Strategies in a Pacific Basin Country"

April 18 David Yoffie, Harvard University "Political Strategies"

April 25 Edward Lawler, University of Southern California "Managing Large Scale Organizational Change"

May 2 Roger Hale, CEO, Tennant Corp. "The Quality Emphasis Program at Tennant"

May 9 Steve Krasner, Stanford University "Issues Related to Japanese Trade"

For more information please contact Susan McGuire at 376-1502. ■

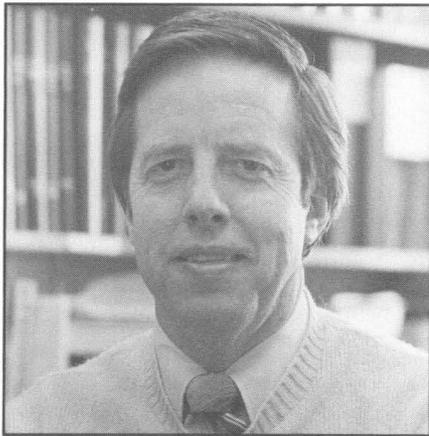
planning; organizational performance and general business management.

The SMRC provides an infrastructure that creates an intellectually stimulating community for learning and provides innovative outreach services to the management community through: Strategic Management Colloquium of distinguished speakers; executive breakfast roundtable discussions; discussion paper series on Center research findings; "seed money" grants to support embryonic research projects; professional and academic conferences on cutting-edge topics; visiting research professorships and fellowships; research apprenticeships, field training, and access to sites; Center newsletter ■

coming in **Ambiguity and Command: Organizational Perspectives on Military Decision-Making**, Pitman Publishing Co.

Lane A. Daley, assistant professor of accounting: "Controlling Preferences for Lotteries on Units of Experimental Exchange" (with **John W. Dickhaut**, professor of accounting, **Joyce Berg**, Ph.D. candidate, and John O'Brien), accepted for publication in the *Quarterly Journal of Economics*. "Attitudes Toward Financial Control Systems in the United States and Japan" (with James Jiambalvo, Gary Sundem, and Yasumasa Kondo), accepted for publication in the *Journal of International Business Studies*.

Gordon B. Davis, Honeywell Professor of Management Information Systems, lectured and provided educational consulting at the National University of Singapore in November.



Gordon Davis

Alan Dubinsky, visiting associate professor of marketing and business law: "Job-Related Responses of Insurance Agents: A Multi-Firm Investigation," *Journal of Risk and Insurance*, September 1985.

Jack Flagler, program director in industrial relations, presented a paper on credibility resolution at the National Academy of Arbitrators' annual education conference in November. Flagler chaired the Arrangements Committee.

R. Edward Freeman, associate professor of strategic management and organization, and Richard Bergquist, College of St. Thomas philosophy professor, were featured on the "Midday" show of Minnesota Public Radio in October. They spoke on the U.S. Catholic Bishops' letter on the economy.

Kenneth Gagala, director of the Labor Education Service: "A Wobbly-Bred Campaign in Minnesota," *Labor Research Review*, September 1985. In November he participated in "Union Power—Alternatives in Dealing with Cutbacks and Union Busters," sponsored by the Kansas City (MO) Labor Council, AFL-CIO.

Doris Holt, assistant professor of accounting, presented "Evidence Integration in Risk Assessments by Auditors and Bank-Lending Officers" at the University of North Carolina, Chapel Hill, N.C.

John Lehman, assistant professor of management sciences: "Organizational Size and Information System Sophistication," *Journal of Management Information Systems*, winter 1986.

Charles Manz, assistant professor of strategic management and organization: "Self-Leadership: Toward a Comprehensive Theory of Self Influence Processes in Organizations," *Academy of Management Review*, in press. "Leading Self-Managed Groups: A Conceptual Analysis of a Paradox" (with H. Sims), *Economic and Industrial Democracy*, in press. He conducted a workshop on leadership and self-leadership for the Minnesota Municipal Utilities Association's annual conference. In April he will serve as a panel member in the Society for Industrial/Organizational Psychology's symposium, "Observational Methods: Illustrations in Leadership and Collective Bargaining Situations."

Sal March, associate professor of management sciences, co-chaired "Information Resource Management: Making It Work," the National Bureau of Standards Database Directions Conference, in Fort Lauderdale, Fla.

Alfred A. Marcus, assistant professor of strategic management and organization, received a Dean's Innovation Fund grant for his project, "Business Strategy and Public Policy: Perspectives from Academia and Industry."

Rudy Pinola, director of the Industrial Relations Center Policy Studies and Development Service: **Modern Microeconomic Theory** (with William Sher), Elsevier Science Publishing Co., Inc., N. Y., February 1986.

William Rudelius, professor of marketing and business law, received a Dean's Innovation Fund grant for his project, "Improving the New Product Process."



Bill Rudelius

James Scoville, professor of industrial relations, participated in "An Economic Analysis of Labor Market Premia for Traditional Skills in Developing Countries," an AEA-IRRA panel. He was also invited to speak at a Harvard colloquium which honored John T. Dunlop, Harvard University professor emeritus and former secretary of labor under President Ford.

Gary D. Scudder, assistant professor of management sciences, and **Tom Hoffmann**, professor of management sciences, presented "The Use of Cost Information in Priority Scheduling" at the International APICS (American Production & Inventory Control Society) meeting in Toronto. **Scudder** presented "Innovation in Manufacturing" (with **Roger Schroeder**, professor of management sciences) at the Institute for Decision Sciences meeting in Las Vegas, Nev.

Shyam Sunder, professor of accounting: "Stock Price and Risk Related to Accounting Changes in Inventory Valuation," **The Modern Theory of Financial Reporting**, Business Publications, 1986. **Sunder** and **W. Bruce Erickson**, professor of strategic management and organization, discussed mergers and acquisitions on "Talking Sense," a KUOM radio program hosted by Andy Marlow. **Sunder** presented "The LIFO Puzzle: Slow Disciplining of Managers in a Rational Expectations Economy" (with **Amin Amershi**, associate professor of accounting), at Indiana University, Bloomington, Ind.

Terry Tranter, adjunct assistant professor of accounting: "Evaluating Resource Productivity" (with S.J. Bevacqua and Michael J. Barrett), Internal Auditing, fall 1985.

Andrew Van de Ven, professor of strategic management and organization and 3M chair: "Testing the Organizational Assessment Model of Work Unit Design and Satisfaction: A Systems Approach" (with Christopher Gresov and Robert Drazin), September 1985. "Strategic Planning and the Revitalization of the Public Service" (with **John M. Bryson** and **William D. Roering**) will appear in **The Revitalization of the Public Service**, University of Missouri Press, 1986.

James C. Wetherbe, professor of management sciences and director of Management Information Systems Research Center: "An Investigation of the Information Center from the User's Perspective" (with **James C. Brancheau**, research assistant and Ph.D. student, and **Douglas R. Vogel**, research coordinator and Ph.D. student), *Data Base*, fall 1985. **Wetherbe** is editor of *Data Base*. He also presented the following: "End-User Computing: Avoiding Monarchy and Anarchy in Policies and Procedures," Society for Information Management annual conference, Boston, Mass.; "Determining Management's Information Requirements," Association for Systems Management (ASM), Minneapolis; and "Data Security in an Information Society," at the Federal Reserve Data Security Conference, Minneapolis.

Andrew Whitman, professor of finance and insurance, participated in a discussion of liability insurance problems focusing on the high cost of medical malpractice coverage on KUOM radio in November.

C. Arthur Williams, Jr., professor of finance and insurance: "Minimum Weekly Workers' Compensation Benefits," **Workers Compensation Benefits: Adequacy, Equity and Efficiency**, New York State School of Industrial and Labor Relations, Cornell University, 1985. "Risk Management in Japan: An Outsider's Perspective," *Risk Management*, Vol. 32, No. 8, August 1985. **Williams** presented "Social Security: Past, Present, and Future," at the Economic Security Symposium at Bryn Mawr sponsored by The Wharton School

Pension Research Council and The American College and "Higher Prices, Less Coverage," at a meeting of the Building Owners and Managers Association of Minneapolis.

Mahmood A. Zaidi, professor of industrial relations and director, international program development: "Market and Spillover Forces in Wage Award Determination in Australia," *Applied Economics*, January 1986. He presented "Minnesota Industrial Relations Model" at the International Industrial Relations Association's workshop held in Maastricht, The Netherlands, in October.

Deceased

Richard L. Kozelka, 86, former School of Management dean and faculty member, died November 1985.

For reprint information call (612) 373-4495 or write Laurel Hamilton, Office of the Dean, 271-19th Ave. S., Minneapolis, MN 55455. Copies of *Risk Management and Insurance issues can be obtained from Professor C. Arthur Williams, Jr., Department of Finance and Insurance, 271-19th Ave. S., Minneapolis, MN 55455.* □

Alumnus recognized for accounting skills

Gary Paul Peterson, 1985, received national and local recognition for achieving high scores on the Uniform CPA Examination taken by more than 67,000 persons across the nation last spring. Peterson was one of 123 persons who received the Elijah Watt Sells certificate for performance with high distinction, presented by the American Institute of Certified Public Accountants for the highest scores nationally.

He also received the President's Award, presented by the Minnesota Society of CPAs, for achieving the highest scores in Minnesota where 688 persons took the exam.

Peterson is an assistant tax specialist with Peat, Marwick, Mitchell & Co. in Minneapolis. He is a 1981 graduate of Springfield Public High School where he graduated valedictorian of his class.

The Minnesota Society of CPAs is the statewide professional association of more than 6,000 certified public accountants. □

Consolidated Fund Drive breaks records

The 1985 School of Management Consolidated Fund Drive broke all established records - and then some! Participation rose from 87 to 152, a 75 percent increase.

The United Arts Fund, the Cooperating Fund Drive and the United Way were combined this year to form the Consolidated Fund Drive.

Overall school campaign giving more than doubled, from \$10,147 to \$21,165. Giving for the three comparable programs in last year's campaign increased just under 150 percent. Per capita giving doubled, breaking the \$100 barrier for total population and reaching \$140 for all givers.

University deans and department heads led their respective units to encourage support for the Drive. Under the direction of Dean Preston Townley, School of Management planning and organizing started early. Townley kept department chairs and volunteer campaigners informed from the start and throughout the Campaign. The two-week Campaign included much personal contact with employees.

"These are wonderful numbers," Townley said. "They demonstrate real support of the community. We can all be proud of them." □

School to launch Shanghai exchange

The School of Management recently signed a memorandum of agreement with the Shanghai Institute of Finance and Economics establishing a student/faculty exchange program.

The program will enhance mutual understanding and improve teaching and research standards as well as promote economic exchanges between the People's Republic of China and the United States. It will begin fall 1986. More information will be provided in the spring 1986 *Minnesota Management Review*. □



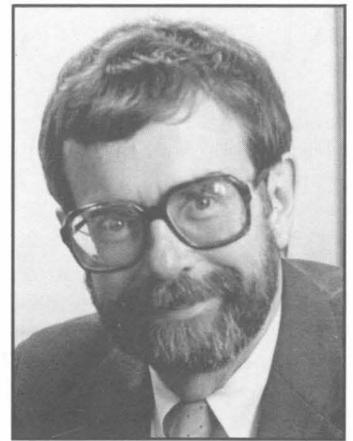
Barbara F. Adams



Robert J. Carlson



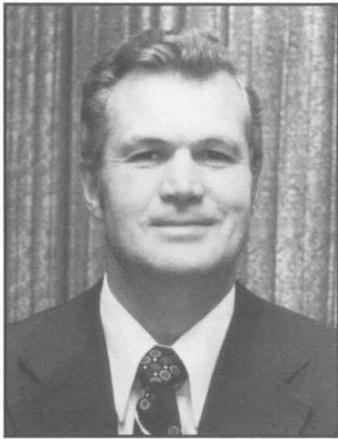
Dennis M. Cavanaugh



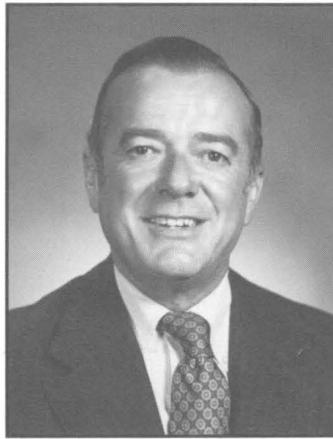
Thomas M. Dale, Jr.



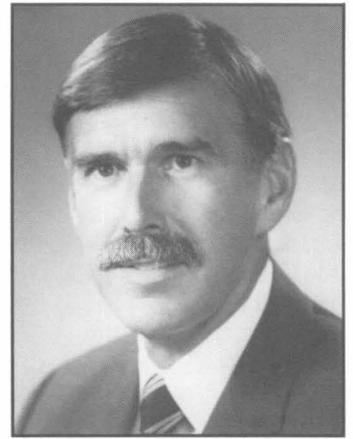
William D. Dunlap, Jr.



Richard L. Knowlton



William E. Mayberry



Stephen M. Wolf

Not pictured: Barbara Armajani, Lloyd P. Johnson, and Duane R. Kullberg

Eleven business and community leaders appointed to school's advisory board

The School of Management welcomed 11 new members to its Board of Overseers last fall. New members represent a breadth of expertise and perspective, from banking, finance and accounting, to advertising, manufacturing and transportation, to medicine and small business.

The Board of Overseers is an advisory body created by the school to maintain a strong relationship with the community it serves. The Board is comprised of business and community leaders who recognize the need for quality management education at the University and its importance to the community.

Overseers help create public recognition of, understanding of, and confidence in the School of Management. They are individually and collectively influential in ensuring a user perspective in the school's strategic planning.

The 39 Board members serve on one of two committees—Academic Affairs or External Affairs. They are appointed by the Dean for three-year terms.

Newly appointed overseers include: **Barbara F. Adams**, chairwoman, Satellite Northwest Inc; **Barbara Armajani**, chief

executive officer, Pinstripes Petites, Inc; **Robert J. Carlson**, chairman, president and chief executive officer, BMC Industries, Inc.; **Dennis M. Cavanaugh**, president and chief executive officer, Soo Line Corp.; **Thomas N. Dale, Jr.**, chairman and chief executive officer, Dain Bosworth Inc.; **William D. Dunlap, Jr.**, chairman and chief executive officer, Campbell-Mithun, Inc.

Other new members are: **Lloyd P. Johnson**, chairman, president and chief executive officer, Norwest Corp.; **Richard L. Knowlton**, chairman, the Hormel Corp.; **Duane P. Kullberg**, managing partner-chief executive officer, Arthur Andersen & Co.; **William Eugene Mayberry**, chairman of the board of governors, Mayo Clinic, and vice chairman of the board of trustees, Mayo Foundation; and **Stephen M. Wolf**, president and chief executive officer, Republic Airlines.

Retiring members include: **Thomas E. Epley**, former vice president and general manager, FMC Corp.; **Carl Drake**, vice chairman, the St. Paul Companies, Inc.; **Jaye F. Dyer**, president and chief executive officer, Dyco Petroleum; **Erwin L. Goldfine**, president, Manley Management Co.; **L. W. Lehr**, past chairman and chief executive officer, 3M; **Kendrick B. Melrose**, president and chief executive officer, The Toro Co.; **William G. Phillips**, chairman, International Multifoods; **John W. Morrison**, retired chairman, Norwest Corp.; **Donald F. Swanson**, retired vice chairman, consumer non-foods and restaurants, General Mills; and **F.B. Weyerhaeuser**, past president and chief executive officer, Conwed Corp. □

Alumni celebrate Homecoming/Reunion

Hundreds of alumni returned to the School of Management to celebrate the school's first combined alumni reunion and homecoming weekend last October. Members of the classes of 1935, 1945, and 1960 celebrated their 50th, 40th, and 25th anniversaries of graduation from the School of Management.

During a special administrative presentation, Dean Preston Townley shared his goals for the school with visiting alumni. Townley spoke enthusiastically about his agenda of making Minnesota one of the top five public business schools in the nation, raising the quality of the undergraduate experience through more student/faculty interaction, and building a stronger funding base for the school.

Acting Director of Undergraduate Studies Jerry Rinehart gave an historic overview of course content and program emphasis. He concluded that while there have been a variety of tacts over the past 50 years, school philosophy and intent in 1985 was quite similar to that in 1935 - a good general management education with a liberal arts base and some hands-on experience.

Some of the school's retired faculty members were special guests at weekend events. Alumni of all classes were delighted to visit with returning faculty emeriti who came back, including the late **Richard Kozelka**, former dean of the school, and professors **R. K. (Dick) Gaumnitz**, St. Paul, Minn., **Edwin Lewis**, Minneapolis, **Edmund Nightingale**, St. Paul, Minn., and **Allen Solem**, Gainesville, Fla.

"Celebration" was the weekend theme and the celebrations took a variety of forms. Members of the anniversary classes had lunch with current School of Management student leaders. It was a lively session that compared the "Business School" of the 1930s, 1940s, and 1960s with the School of Management of the 1980s! Reminiscing was a big part of the alumni weekend.

"The round-trip walk on the Washington Avenue Bridge was fun," said **Louise Krebs Kaiser**, '35, of Western Springs, Ill., reminiscing about the '30s when the Bridge was struck by lightning and closed to all but streetcar traffic. Krebs also enjoyed visiting her "old haunt" Eddy Hall and seeing the Homecoming decorations on "fraternity row."

Allan Arneson, '35, Iowa City, Iowa, recalled how he handled a promotion to inventory control at J.C. Penney Co. after graduation. He quickly pulled out his retail textbook and class notes and did some homework. That and his in-class experience helped him do a top job and save the company considerable money in the process. His method set precedent for future J.C. Penney inventory control systems.

The class of '45 shared memories of gas rationing during World War II. No parking problems back then. Everyone took the streetcar since gasoline was in such short supply.

Other alumni recalled the creaking floors in Eddy Hall, the oldest building on campus and early home to the business school. One could always find the perpetual bridge game going on in the basement "student lounge."

Visiting alumni attended a special seminar on the "Management of Innovation," by **Andrew H. Van de Ven**, 3M Professor of Human Systems Management and director of the Strategic Management Research Center, during the weekend. Van de Ven led

the group through four central problems of managing innovation: a human problem of managing attention; a process problem of managing new ideas into good currency; a structural problem of managing part-whole relationships; and a strategic problem of leadership. **Bill Rudelius**, marketing professor, conducted a follow-up session on innovation in small business, and **Michael Rappa**, Ph.D. candidate, spoke on technological innovation in international business, based on his research experiences in Japan. The seminar was planned and sponsored by the Alumni Advisory Council's MBA Programs Committee, chaired by **Sally Scheefe**, '81MBA.

Reminiscing was formalized when the reunion/homecoming banquet guest speaker, **Dick Gaumnitz**, professor emeritus, led his former students and colleagues through years of School of Management highlights and changes. And, 50 years of memories were enhanced by the music of a string trio of members of the former Radisson Minneapolis Hotel's "Flame Room Golden Strings."

Frances Enright Artz '35, **Frank Leistiko** '35, **Mary Beth Mee** '35, **Mary O'Keefe Geurs** '45, and **Jim Brandt** '60 formed the committee that sponsored the special weekend reunion events.

Several special interest groups helped plan the reunion/homecoming weekend, including MBA and Delta Sigma Pi alumni and students who held a special celebration. They dedicated the new Delta Sigma Pi Student Lounge as part of the official opening of the school's new and renovated facilities.

Student leaders hosted alumni and guests as they toured the new School of Management facilities during a pre-homecoming game open house.

The weekend's activities formally ended with the Gophers vs. The Ohio State Homecoming football game. Minnesota alumni around the country participated in the Homecoming celebration through the national televised game.

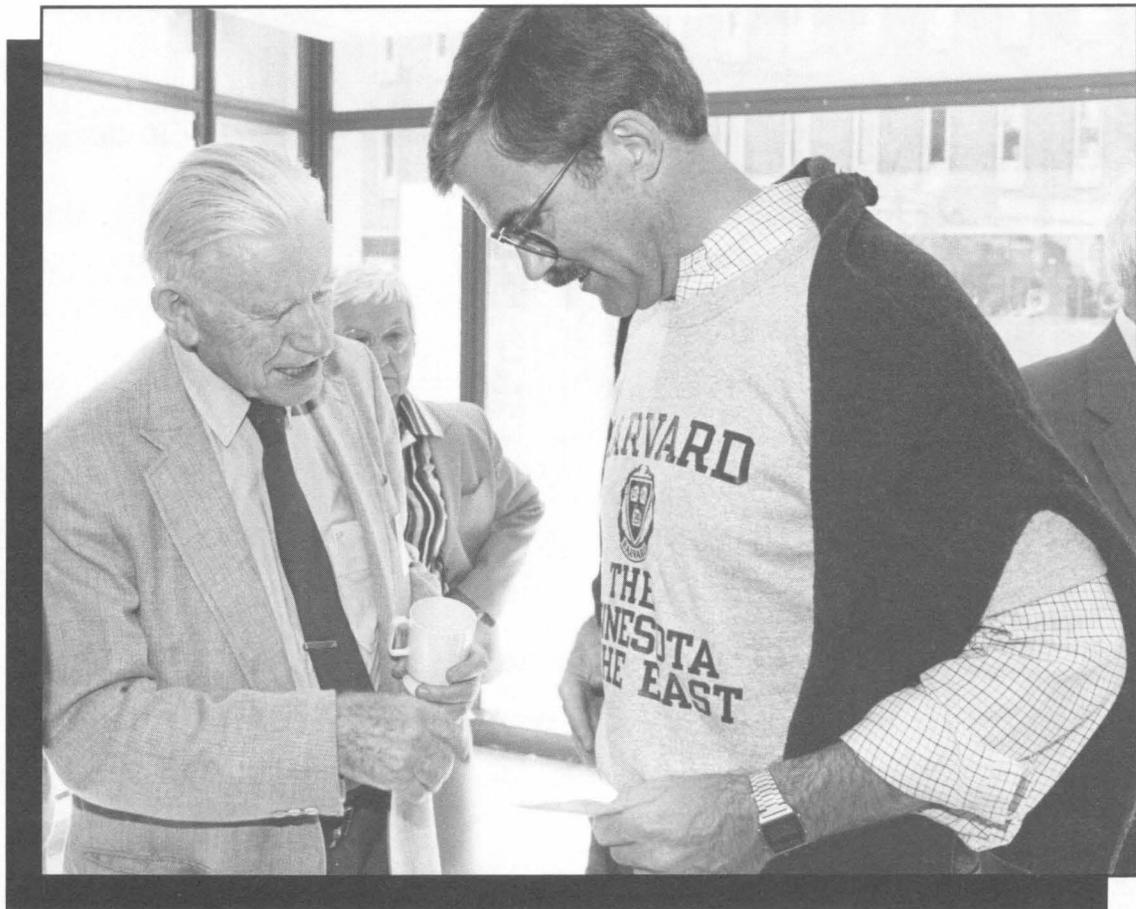
Alumni enthusiasm for the weekend was evidenced by the plentiful post-reunion correspondence received by the school's alumni relations office.

"... meeting Dean Preston Townley, other faculty members, and some of the current students, and seeing the new facilities, almost made us want to come back for an MBA degree," said **Arnie and Dee Bonnicksen**, '35, of Seattle, Wash.

"As a Minnesota undergrad who returned 25 years later as a prof for the subsequent 18 years, renewing old friendships and visiting old haunts was a real treat," wrote professor emeritus **Allen B. Solem**, of Gainesville, Fla.

Solem pretty much summed it up for all visiting alumni, "Everything about my Minnesota years was good."

In the fall of 1986, the School of Management will again host its alumni reunion in conjunction with the University's homecoming weekend on October 10 and 11. Anniversary class alumni interested in getting involved in the planning committee or who seek more information, contact Jeanne Katz Carroll, alumni relations, University of Minnesota School of Management, 271-19th Ave. S., Minneapolis, MN 55455, (612) 376-3217. □



Professor Emeritus Edmund Nightingale enjoyed Dean Preston Townley's tee shirt which read "Harvard The Minnesota of the East." Townley arrived at the Saturday morning celebration fresh from the University's Homecoming "Celebrity Pancake Breakfast."



Members of the Class of '35 shared dinner and memories. Below the Golden Strings serenade alumni.



Jim Arnett '37 (left), and wife Gen, '37, visited with the late Richard Kozelka, professor emeritus and former dean of the school.

Alumni News

1920s

Lawrence S. Clark, '22, is retired. In January he moved from Edina, Minn. to Issaquah, Wash. to be near his family.

1930s

Alan K. Ruvelson, '36, is president of First Midwest Corporation, Minneapolis. In November Ruvelson and Darrel Erdman, College of St. Thomas, presented "Risks Involved" at the Minnesota Business Hall of Fame Awards Program at the St. Paul Radisson Hotel, St. Paul, Minn.

1940s

Arline B. Dimond, '43, retired as executive secretary to the board of trustees for the Minneapolis Children's Medical Center. She held this position for 21 years.

Marjory Jelmeland Immer, '49, has retired as director of administration and finance of Zero Population Growth, Washington, D.C. Immer is secretary of the U of M alumni group in Washington, D.C. and attended their October meeting, where U of M President Kenneth Keller spoke.

Edward Landes, '41, is vice president of financial development for the Minneapolis YMCA. He is a retired IBM marketing executive and a member of the U of M Alumni Association's Executive Committee.

Rholan E. Larson, '47, CPA and managing partner of Larson, Allen, Weishair & Co., Minneapolis, received the Gold Medal Award by The American Institute of Certified Public Accountants.

1950s

George L. Glotzbach, '53, was recently appointed to direct Alexander & Alexander, Inc.'s mass-marketing division in Baltimore, Md. Alexander & Alexander, Inc. is an international insurance brokerage and consulting firm.

Donald E. Sveen, '54, is chief operating officer and executive vice president of John Nuveen & Co. Incorporated, Chicago. He lives in Wheaton, Ill.

1960s

George M. Shortley, '62, was recently elected executive vice president of PSA, Inc., San Diego, Calif.

James N. Verhey, '65, is president and senior consultant with Normandale Associates, Inc., Reno, Nev. He was elected a member of the Institute of Management Consultants and certified as a CMC (Certified Management Consultant). Verhey is a past member of the American College of Hospital Administrators.

Mary Kay Walley Foss, '66, is a tax manager for Armstrong, Lorenz, Gilmore & Whalen in Walnut Creek, Calif. She lives in Danville, Calif.

Michael F. Mee, '68MBA, is vice president of finance and chief financial officer at Norton Company, Worcester, Mass. Mee lives in Concord, Mass.

Thomas L. Slavik, '68, is a market development supervisor with 3M, St. Paul, Minn.

James R. Dougall, '69, is vice president and general manager of the heating division, Modine Manufacturing Co., Racine, Wis.

Thomas B. Kelley, '69MBA, is chairman and chief executive officer of Bank America Investment Management Corporation in San Francisco. He lives in Piedmont, Calif.

1970s

William C. Ludwil, '71, joined Jerome Foods, Barron, Wis. in August as their director of quality assurance and process control. Before this he was with the Geo. A. Hormel Co. for 14 years.

Thomas Green, '72, owns VR Business Brokers, Minneapolis, which employs 12 full-time brokers. Two years ago he established St. Clair Secretarial Service. Green lives in Minneapolis.

Mohan N. Amberker, '74MBA, is president of Amberker Assoc. Inc., St. Paul Corporation, Minneapolis.

John J. Weston, '77, is district manager for Midas International Corp., Chicago. He is responsible for the franchise dealer network of 48 Midas Muffler shops in North Dakota, Minnesota, Wisconsin, Michigan, and Iowa. Weston lives in St. Louis Park, Minn.

Vickie Ellen Dirks, '78, is accounting/credit manager with DataMyte Corporation, Minnetonka, Minn.

William R. Wight, '78MBA, was admitted to Coopers & Lybrand's Partnership in Taxation in December. Coopers & Lybrand are certified public accountants in Minneapolis.

Sandra L. Campion Becker, '79MBA, is an investment officer with Phoenix Mutual Life Insurance Co., Hartford, Conn. She has held this position for more

than three years and married one and one-half years ago.

John L. Shannon, Jr., '79MBA, is vice president of Threshold Ventures, Inc., Minneapolis. He lives in Eden Prairie, Minn.

1980s

Anwar H. Bhimani, '80MBA, is vice president/controller for FBS Insurance, Minneapolis.

Judith M. Luchau, '80, is a senior EDP auditor for Dayton Hudson Department Store Co., Minneapolis.

John C. Masters, '80MBA, is an assistant vice president with Bank of America, Chicago. He lives in Glenview, Ill.

James E. Richard, '80, is district sales manager for Procter & Gamble, Minneapolis.

Louis C. Arp, '81MBA, is a manager of manufacturing systems with G. D. Searle, Skokie, Ill. He now lives in Wheeling, Ill.

Jennie Hilburn Barker, '81MBA, is a financial analyst with the Office of Budget and Audit, University of Pittsburgh, Pittsburgh, Pa.

John H. Conley, '81, is a marketing manager with Appleton Papers Inc., Appleton, Wis.

William Elkins, '81MAIR, joined Monsanto Company, Nitro, W. Va. as a senior area personnel supervisor in January 1985. He was formerly with Inland Steel Co., Chicago. He and his wife, Susan, live with their two children in Cross Lanes, W. Va.

Lea Mitchell Fritsch, '81MBA, is an assistant finance director with the City of Boulder in Colorado. She married Gerry Fritsch in May, 1983.

Timothy G. Indihar, '81, was promoted from employee benefits communications specialist to a division personnel specialist of Cargill, Inc., Minneapolis. He works in the commodity marketing division.

Margaret M. Kasper, '81MBA, is assistant vice president for bank equity research at the Chicago Corporation in Chicago.

Richard T. Leung, '81MBA, was promoted to vice president, Citibank N.A., Hong Kong. He is in charge of a division responsible for marketing and processing banking services to multinational corporations in the services industry.

David H. Messick, '81MBA, is a self-employed consultant. He lives in Minneapolis.

Jill L. Newstrom, '81MBA, is a market research specialist at Honeywell Inc., Minneapolis. She married Bill Nagel of Des Plaines, Ill. in November.

Linda E. Novotny, '81MBA, is systems engineer with IBM, Los Angeles. This past year she vacationed in France.

Gwen E. Obermiller, '81MBA, is an economic analyst with Alaska Power Authority, Anchorage, Alaska.

Kathy A. Peterman, '81MBA, is a senior operations consultant with IDS Financial Services, Minneapolis.

Luann Bernhagen Pheneger, '81, is a marketing proposal specialist at Lee Data Corporation, Eden Prairie, Minn.

Jill E. Quarnstrom, '81MBA, is personnel manager with Pillsbury/Green Giant, Ripon, Wis.

David Reynolds-Gooch, '81MBA, is a marketing manager at 3M, St. Paul, Minn.

Judith S. Rutscher, '81MBA, is supervisor of forward pricing at FMC-Northern Ordnance Division, Minneapolis. She lives in Stillwater, Minn.

Mark S. Sanquist, '81MBA, is information center administrator at Thermo King, Minneapolis.

Rich Sathe, '81MBA, is a financial analyst with Krelitz Industries, Inc., Minneapolis.

Kevin L. Shaver, '81MBA, is an inventory administrator with Farm Credit, St. Paul, Minn.

Kimberly O'Grady Simensen, '81MBA, is a senior associate with Dain Bosworth Inc. She is managing underwriter primarily for health care financings.

Iris C. Stuart, '81MBA, is an assistant professor in the Department of Economics, Accounting, and Management at Luther College, Decorah, Iowa.

John T. Sweeney, '81MBA, is director of marketing planning at IDS/American Express, Minneapolis.

Cathie Michlitsch Tinney, '81Ph.D., was promoted to tenured associate professor of marketing at St. Louis University, St. Louis, Mo.

Jeanne Marie Vogelzang, '81MBA, attends the University of Chicago Law School and is a part-time law clerk with Chapman & Cutler, Chicago. Previously, she was a financial analyst with Quaker Oats Co., Chicago.

Gary D. Agnew, '82MBA, is assistant manager of market planning at Burlington Northern Railroad, Fort Worth, Texas.

Brian S. Balleria, '82MBA, is a product manager with Aequitron Medical Inc., Minneapolis.

John T. Barber, '82, is a district sales manager for the western division of Pepsi-Cola, Newport Beach, Calif.

Ted Biesanz, Jr., '82MBA, is an account executive with Stone & Adler, a direct marketing ad agency, in Chicago.

Cheryl R. Cooper, '82MBA, is a staff consultant with Arthur Andersen and Co., Minneapolis.

Gregory P. Crinion, '82MBA, graduated from the University of Wisconsin Law School in 1985 and is an attorney with Exxon Company, Houston.

Martha D. Cushing, '82MBA, is a program officer in private sector development for the U.S. Agency for International Development, Karachi, Pakistan.

Wayne A. Dougherty, '82, is a consumer sales representative with Best Foods U.S., a division of CPC International in Pleasanton, Calif.

Gregory T. Erickson, '82MBA, is an assistant vice president of MIS for Northland Insurance Co., St. Paul, Minn.

Mark W. Erickson, '82, has accepted a position with AmeriSource Business Center, St. Paul, Minn. as a managerial systems consultant, specializing in computerized accounting and financial applications.

Jane F. Foreman, '82MBA, is area sales manager for Teradyne, Deerfield, Ill.

John A. Gappa, '82MBA, is a manager in financial analysis for Burger King, Miami, Fla.

Peter A. Garretson, '82MBA, is a commercial banking officer with First Bank St. Paul, St. Paul, Minn.

Laura Pearson Gauvin, '82MBA, is manager of bank reporting at the First Wisconsin National Bank, Milwaukee, Wis. She was also made an accounting officer.

Dorette W. Hemker, '82MBA, is a consulting manager for Peat, Marwick, Mitchell & Co., Minneapolis.

Al Henningsgaard, '82MBA, is sales manager for Fluoroware Inc., Chaska, Minn.

Carol Kronebusch Hubbard, '82MBA, is a financial planner with IBM, Rochester, Minn.

Joseph Mork, '82MBA, is marketing manager of Lawson Professional Services, Minneapolis.

Shari Render Miller, '82MAIR, started Message Miser, Inc. as an alternative to answering services, providing voice messaging and paging services. Message Miser, Inc. is located in Minneapolis.

Jean Palmer Miller, '82MBA, is a financial analyst with Country Life Insurance Co., Bloomington, Ill.

Jack Schanbel, '82, is a product specialist with Comserv, Eagan, Minn.

Howard W. Schwartz, '82MBA, is administrative director of the University of Minnesota Hospitals Department of Radiology. He is president-elect of the American Hospital Radiology Administrators Midwest Region and chairman of the editorial committee for the American Hospital Radiology Administrators.

Evan C. Shadduck, '82MBA, is a vice president of finance for Consolidated Electric Co., St. Paul, Minn. He passed his CPA exam in spring 1983.

Glenda Sime, '82MBA, is a staff accountant with Honeywell Inc., Hopkins, Minn.

Jeanette M. Sullivan, '82MBA, is a microcomputer manager with the Hennepin County Library, Minnetonka, Minn.

Mark A. Thompson, '82BSB, is an associate portfolio manager and analyst with IDS Financial Services, Greenwich, Conn. He and his wife, **Kimberly Austin Thompson**, '82 BSB, had their second child, Matthew, in July.

Elisabeth J. Trach, '82MBA, is in marketing at General Mills, Minneapolis.

Tom M. Whaley, '82MBA, is a manufacturing engineer for Control Data, Bloomington, Minn. He enjoys playing raquetball and tennis and played on the Control Data team that placed first in the Commercial Tennis League.

William G. Woodington, '82MBA, is a control accountant with First Bank Minneapolis. He lives in Shoreview, Minn.

Hon-Ming Yong, '82, is a trading executive with FedFlour Trading(S) Pte., Ltd., Singapore.

Lawrence D. Anderson, '83MAIR, was appointed manager of employment and placement for IBM, Princeton, N.J.

Barbara Edwards, '83, is an assistant professor of management at St. John's University, Collegeville, Minn. She is a doctoral candidate in business administration in the department of strategic management and organization at the University of Minnesota.

Alumni News continued

Laura Potthoff Eggert, '83, is a staff accountant with Adrian Helgeson and Company, Minneapolis. She obtained her CPA license in October.

Lane D. Hersey, '83MBA, is a vice president and chief electrical engineer with Ellerbe Architects/Engineers, Bloomington, Minn.

Jeanne M. Keller, '83MBA, is a financial planner and registered representative with Waddell & Reed Financial Services Corp., Mendota Heights, Minn. She was elected president of the board of directors at the Playwrights' Center in July. Before that, she was treasurer of the board. In addition, Keller just finished an 18-month term as program chairperson for the Northland Business Association.

Marilyn Rand Kemme, '83MBA, is a securities analyst with Lutheran Brotherhood, Minneapolis.

Tani K. Maruyama, '83MBA, is in marketing at 3M, St. Paul, Minn.

Virginia L. Maudal, '83MBA, is a systems analyst at IDS/American Express, Minneapolis.

Sarah E. McCree, '83MBA, is an assistant marketing manager with Land O'Lakes Inc., Minneapolis.

Susan B. Narayan, '83MBA, is a marketing research supervisor at 3M, St. Paul, Minn. Her first child, Angela Jeanne, was born in September 1984.

Scott D. Opsal, '83MBA, is an associate senior security analyst at Valve Investors, Des Moines, Iowa.

Daniel R. Peterson, '83MBA, is senior financial analyst, international group, at Pillsbury, Minneapolis.

James R. Pugh, '83MBA, is director of finance and planning at the Winchester-Thurston School, Pittsburgh, Pa.

Ian P. Rodricks, '83MBA, is a financial analyst with 3M, St. Paul, Minn.

Richard W. Seaberg, '83MBA, is an account manager with Burroughs Corp., Minnetonka, Minn.

Robin L. Selvig, '83MBA, is a business manager at CSC Systems and Services, Eden Prairie, Minn.

Lindsay A.E. Shorter, '83MBA, is operations manager for the Rochester Area Chamber of Commerce, Rochester, Minn. She is implementing Leadership 2000, Rochester's first community leadership development program.

Calvin F. Sprain, '83MBA, is a financial manager with Best Line Inc., Hopkins, Minn. He lives in Stillwater, Minn.

Barbara J. Steffen, '83MBA, is a stockbroker with Blunt Ellis & Loewi, Madison, Wis.

George L. Stoffel, '83MBA, is a diagnostic product specialist at Abbott Laboratories, Indianapolis, Ind.

Dean A. Sundquist, '83MBA, is a financial manager with Mate Punch & Die Co., Anoka, Minn.

James S. Vogel, '83MBA, is on the marketing staff of Maxicare Health Insurance Co. of Wisconsin, Milwaukee, Wis.

Anthony W. Waldera, '83MBA, is vice president of operations for Sentry Technologies Inc., Excelsior, Minn.

Margaret M. Watry, '83MBA, is a financial analyst with Abbott-Northwestern Hospital, Minneapolis.

Randy H. Zats, '83MBA, is an accountant with Touche Ross, Minneapolis.

Spiros Andronikakis, '84MBA, is the manager of the treasury department at the Ionian Popular Bank of Greece, its third largest commercial bank. He served as an officer in the Greek Navy for 13 months and was hired by the bank in July. Andronikakis lives in Athens, Greece.

Janice Hanson Angell, '84MBA, is an employee development analyst at 3M, St. Paul, Minn. She was married in July.

David J. Biemesderfer, '84MBA, is a planning analyst at 3M, St. Paul, Minn.

Duane H. Bjorlin, '84MBA, is in real estate development with Marfield, Belgarde and Jaffe, Minneapolis. He works on leasing coordination and new project development.

John C. Brandel, '84MBA, works at Electronic Data Systems, Southfield, Mich.

Barry R. Cartmill, '84MBA, was promoted to associate programmer at IBM, Poughkeepsie, N.Y. His daughter, Kimberly Beth, was born in February.

Priscilla R. Dixon, '84MBA, is an assistant staff manager of business research at Wisconsin Bell Inc., Milwaukee, Wis.

Patricia Cady Eaton, '84MBA, is director of operations at Employer Lifelines Inc., Minnetonka, Minn. She lives in New Hope, Minn.

Dan H. Elron, '84MBA, is a consultant with Nolan, Norton & Co., Chicago. He married in September, lives in Boston, Mass., and travels a lot for his Chicago firm.

Thomas H. Fidler, '84MBA, and his wife Sue moved into their new home in Bloomington, Minn. last August. Their first child, John, was also born in August.

William M. Gurstelle, '84MBA, is an assistant manager with Northwestern Bell Telephone, St. Paul, Minn.

Linda Harding, '84MBA, is a planning and analysis officer at First Bank System, Minneapolis.

Michael S. Harrington, '84, is a purchasing analyst with Shell Oil Company, Belpre, Ohio. He lives in Parkersburg, W. Va.

Woon Tai Hean, '84MBA, is a merchant in the cocoa department of Cargill Commodity Trading Pte., Ltd., Singapore.

Ronda Swenson Hellman, '84, is coordinator of development services at the American Graduate School of International Management, Glendale, Ariz.

Steven J. Hengstler, '84MBA, is a management consultant with Ernst & Whinney in Minneapolis.

Won H. Huh, '84MBA, is a financial manager with Willard Industries Inc., Minneapolis.

Nadine Koelsch Ingebrand, '84MBA, is an experienced auditor at Arthur Andersen & Co., St. Paul. Her husband, **Jim Ingebrand**, '84MBA, was promoted to senior marketing analyst at 3M, St. Paul, Minn.

Michael Jacowski, '84MBA, is a securities analyst with Ferris & Co., Washington, D.C. He lives in Arlington, Va.

Gerald R. Just, '84MBA, is a staff accountant in the private business advisory services department with Peat, Marwick, Mitchell & Co. in Dallas. He passed his CPA exam in May.

J. Michael Kelberer, '84MBA, is an assistant vice president of computer services at First Bank Minneapolis.

Catherine Salmon Kriske, '84MBA, is a marketing analyst with 3M, St. Paul, Minn. She recently married.

John F. Kromer, '84, is a staff accountant with Larson, Allen, Weishair & Co., St. Louis Park, Minn.

Jody Krenz Marvin, '84MBA, is a project accountant at Honeywell Inc., Plymouth, Minn.

Robin K. Meyer, '84MBA, is a staff specialist in product development with One-Write Systems, a division of Deluxe Check Printers Inc., St. Paul, Minn.

Dean R. Mitchell, '84MBA, is a systems analyst at Burroughs Corp., Detroit. He lives in Westland, Mich.

Melanie J. Mogg, '84MBA, is with Lurie Eiger & Besikof CPAs, Minneapolis.

Gerard J. Morris, '84MBA, is an assistant professor in the computer science department at Moorhead State University, Moorhead, Minn.

Steven L. Nygren, '84MBA, moved to a new position as financial analyst in the financial markets department at 3M, St. Paul, Minn.

Mary Alice Pappas, '84MBA, is vice president of training and development with Servico Management Corporation, West Palm Beach, Fla. She started a training and development function for Servico's 45 hotels in 17 states. Pappas lives in Palm Beach Gardens, Fla.

Margaret L. Porcher, '84MBA, is an accounting manager with Burlington Northern, St. Paul, Minn.

Roger W. Redmond, '84MBA, was promoted to assistant vice president of Piper, Jaffray & Hopwood, Inc., Minneapolis, in November. He lives in Savage, Minn.

Timothy J. Sagehorn, '84, is a financial consultant with Merrill Lynch Pierce Fenner & Smith in Newport Beach, Calif.

Sarah R. Scott, '84, is a sales representative for Varco Incorporated, Edina, Minn.

Vienette Erickson Sprangers, '84MBA, is a systems consultant with Arthur Andersen & Co., Minneapolis. She married Rick Sprangers, a graduate of U of M School of Pharmacy in June 1984.

Julie A. Johnson, '85MBA, is a national accounts representative for the computer forms division of Deluxe Check Printers Inc., St. Paul, Minn. She married Tim Eiden in December in Ames, Iowa.

John E. Nicolay, '85MBA, is vice presi-

dent of corporate development at Lundin Companies, Mankato, Minn. He lives in Chanhassen, Minn.

Donald M. Pusch, '85MBA, is a sales representative for National Home Security in Minneapolis.

Charlene Bryan Steeves, '85MBA, is a project accountant at Honeywell, Plymouth, Minn.

Karen D. Thorson, '85MBA, is a marketing research analyst with BI, Inc., Minneapolis.

Due to space limitations, the *Minnesota Management Review* cannot always carry all alumni entries that we receive. Entries not used in this issue will be published in the following edition. □

Alumni go to White House

Five School of Management alumni will be delegates to the White House Conference on Small Business next August in Washington D.C.

Susan Brill, '84, president of American Custom Uniform, Minneapolis, Manley Goldfine, '49, president of Manley Investment Company, Duluth, James Henley, '49, president of Henley Furniture, St. Paul, C. David Jones, '61, '70 MBA, president of Roth Young Personnel, Bloomington, and Maureen Steinwall, '81 MBA, president of Steinwall Inc., Fridley, will be among 31 Minnesota delegates attending the Conference.

The 1986 White House Conference is the second such gathering, the first was held in 1980. The Conference sponsors preliminary meetings in all 50 states, the District of Columbia and Puerto Rico. Each delegation is comprised of elected individuals and delegates appointed by the governor and the state's congressional delegation. Individual state numbers equal each state's federal electoral votes.

The Minnesota delegation represents the 20 delegates elected at the state preliminary meeting in September and 11 appointed by Gov. Rudy Perpich and the state's congressional delegation. President Reagan will address the White House Conference.

Delegates expect to spend many hours in issue sessions, promoting Minnesota's small business concerns. Conference participants will produce a document that voices small business opinions on all major related issues. The document will be a reference for national legislators as they develop policy and programs to address national economic and development issues.

While the Minnesota delegation is comprised of a variety of backgrounds, all have a common interest in small business. Steinwall is a relative newcomer to the "politics of small business." Degeneration of employer/employee relationships and government "anti-employer" sentiment through unemployment compensation, OSHA and workers compensation brought Steinwall to the preliminary meeting last September. Fellow representatives elected her a delegate to Washington. Steinwall credits her ability to articulate the issues and their relevance to state small businesses as getting her elected to the national convention.

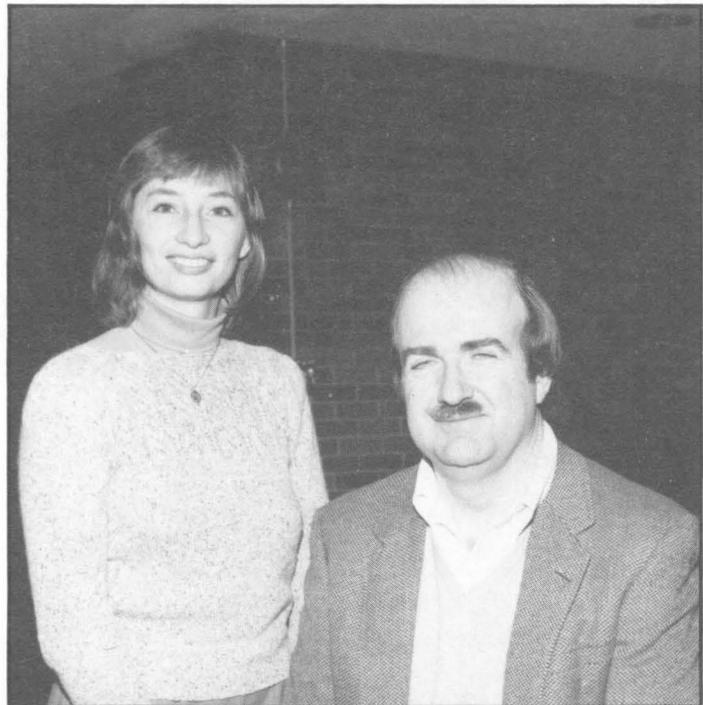


Photo by Tim Rummelhoff

Maureen Steinwall, '81 MBA and president of Steinwall Inc., and **C. David Jones**, '61, '70 MBA, president of Roth Young Personnel will represent Minnesota at the White House Conference on Small Business next summer.

C. David Jones has been involved in statewide meetings on small business issues for several years. In 1984 he was elected one of eight "commissioners" who pooled their efforts with the Minnesota Association of Commerce and Industry's (MACI) Small Business Council. He is also past president of the Bloomington, Minn., Chamber of Commerce. Jones says his broad range of concerns and related experience qualify him for the national conference.

The Minnesota delegation meets monthly in day-long Saturday sessions, developing issues and position papers that eventually will be adopted and promoted by the delegation. Jones is delegation treasurer and works on the taxation committee. Steinwall serves on the economic policy, international trade and education committees.

Business Day '86

Business Ethics: Black and White or Shades of Gray?

The School of Management cordially invites its alumni to explore the role of personal values in business decision-making by attending the 26th Annual Business Day, Thurs., April 17, 1986.

This year's theme is "Business Ethics: Black and White or Shades of Gray?" Activities will be held in the Radisson University Hotel on the University of Minnesota East Bank Campus, 11 a.m.-7:30 p.m. A luncheon has been added to the activities and will be kicked off by Elmer L. Andersen, former governor of Minnesota and chairman of the H.B. Fuller Co. Andersen is well known for his leading role in corporate consciousness and social responsibility. He is a former University regent and a school alumnus. He has held a variety of leadership positions in the public and private sectors.

The afternoon concurrent discussion sessions promise to be thought provoking and informative. Topics include: Marketing: The Exchange of Values—But Whose?; International Business: Responsibility & Ethics in Less Developed Countries; Corporate Takeovers: Justifiable or Not?; Privacy: Ethics and Information; Impending Bankruptcy; What are the Auditors to do?; Ethical Dilemmas of Managers: Dealing with People; Career Planning: How do Corporate Ethics Fit In?

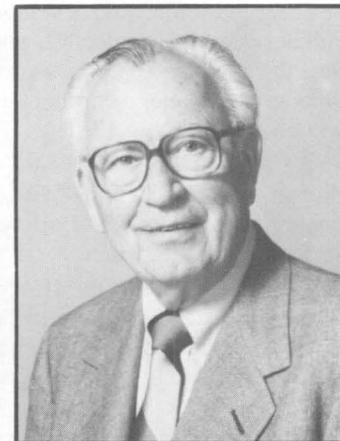
The day will conclude with a social hour, banquet and speech by Curtis L. Carlson, chairman of the Carlson Companies and a University alumnus. Carlson is known for his leadership in corporate philanthropy and is benefactor of the University's Humphrey Institute "Distinguished Carlson Lecture Series." Carlson heads a committee that is studying how the public/private partnership can be more effective in funding higher education.

Business Day is presented to:

Promote education on current business topics and practices.



Curtis L. Carlson



Elmer L. Andersen

Encourage interaction among students, corporate representatives, alumni, faculty and staff.

Celebrate the achievements of members of the School of Management community through presentation of various awards.

Business Day is sponsored by more than 60 area companies. If your firm is interested in being a Business Day '86 sponsor and hasn't received an invitation, or if you would like more information about corporate sponsorship, contact Jeanne Katz Carroll, Alumni Relations Office, (612) 376-3217.

Alumni interested in attending Business Day '86 should fill out the attached alumni registration form, or call the Alumni Relations Office at (612) 376-3217.

Alumni Registration Form

Alumni and their guests are cordially invited to attend Business Day 1986. This year we have expanded the program to include both lunch and dinner. Timely and informative discussion sessions will explore the theme of business ethics and how personal, corporate and community values affect corporate decision making. Afternoon sessions are free (see accompanying story for listing).

Meal costs are \$20 each or \$35 for both; tickets must be purchased in advance. Meal tickets must be picked up April 17, 11 a.m. - 6 p.m. at the registration table at the Radisson University Hotel.

____ Yes, I/We will attend Business Day 1986

I am registering for ____ 12:00 Lunch ____ 6:00 Dinner ____ Both

My guest is registering for ____ 12:00 Lunch ____ 6:00 Dinner ____ Both

I am enclosing a check (payable to: School of Management) for \$_____.

Name _____ Degree & Year of Graduation _____

Company _____ Title _____

Address _____ City, State, Zip _____

Guest's Name _____

Return to: Jeanne Katz Carroll, Alumni Relations, University of Minnesota, School of Management, 271 19th Ave. S., Minneapolis, Minn. 55455. For further information call Jeanne (612) 376-3217.

Alumni explore personal tax planning

Tax shelters, shifting income and deductions, tax credits and capital gains were discussed at a November Personal Tax Planning seminar, conducted by Grover Cleveland, associate professor of accounting, and hosted by the Alumni MBA Programs Committee.

More than 40 alumni heard Cleveland, instructor in the school's Masters of Business in Taxation program, discuss putting together a multi-year personal tax planning strategy. Jim Duevel, '79, '84MBT, discussed tax planning in light of recent and proposed federal legislation.

The seminar, well received by participants and already the "excuse" for at least one automobile purchase, is one in a series of activities planned by the Programs Committee.

For more information about future programs contact Jeanne Katz Carroll, alumni relations office, (612) 376-3217. □

Clark scholars honored at accounting banquet

Accounting student recipients of the Clark Scholarships join their benefactors at the annual Beta Alpha Psi Initiation and Awards Banquet at the Minneapolis Hilton Inn last November. From left to right are: Shelley Chase Olsen; L. Ann Kotbra; John Clark; Jane Clark; Linda

Fleming; and Matthew Ginter. John Clark, '42, established the annual scholarships to award accounting students with outstanding academic credentials and potential. Twenty-one accounting undergraduates and 10 graduates received a variety of scholarships at the banquet. More than 150 students, alumni, faculty and professionals attended. □



What's the scoop?

Minnesota Management Review staff are planning an "Alumni News" format change that will enhance our news and human interest coverage. Please help us design a more lively and effective section by providing news of career, mini-reunions, appointments, trips, weddings, babies and other appropriate items. We also seek photos of individuals or special events. Please send news items and photos to Jeanne Katz Carroll, assistant director, Alumni Relations, University of Minnesota School of Management, 271 19th Ave. S., Minneapolis, MN 55455. Photos will be returned upon request. □

Alumni network at MBA reception

School of Management alumni, faculty and staff gathered at the Minneapolis Athletic Club for the fourth annual MBA Alumni Reception in December. The informal gathering was sponsored by the Alumni Advisory Council (AAC) and provided networking among MBA alumni.

The AAC is committed to planning activities that benefit alumni and receives frequent requests for networking opportunities.

Mark your calendars now for the 1986 MBA reception, Wednesday, November 5, 1986, 5:30 p.m. at the Alumni Club. For reservations or further information contact Jeanne Katz Carroll, alumni relations office, (612) 376-3217. □



Alumni Update

Information furnished by alumni on this form will be used for the "Alumni Update" section of the *Minnesota Management Review* and will help the school maintain accurate home and business address records. Send to: Jeanne Katz Carroll, assistant director, alumni relations, School of Management, University of Minnesota, 271 19th Ave. S., Minneapolis, MN 55455.

Name _____ Date _____
(First) (Middle or Maiden) (Last)

Year of Graduation and Degree(s) granted from School of Management _____

Employer _____ Home _____
Position Mailing Address

Company Organization City, State, Zip

Mailing Address Phone

City, State, Zip

Phone

Information you would like to share with the School of Management (career, family, awards, weddings, births, trips, mini-reunions, etc):

Executive Development Center Programs

I. GENERAL MANAGEMENT

RESIDENTIAL PROGRAMS

- Minnesota Executive Program** (6 weeks)
Modular Format; begins August 1986
- Minnesota Management Institute** (4 weeks)
Modular format; begins February 1986
- Minnesota Management Academy** (9 days)
March 15-22, 1986, October 4-11, 1986

II. MANAGEMENT SPECIALISTS

PROGRAMS

- Systems Analysis and Design** (5 days)
Residential program; three times a year. Upcoming session—May 18-23, 1986
- Strategic Management of Manufacturing** (7 days)
Residential programs; once a year. Upcoming session—June 15-21, 1986
- Controllership Academy** (6 days)
Residential program; once a year. Upcoming session—June 22-27, 1986
- MIS Executive Institute** (8 days)
Residential program; once a year. Upcoming session—May 31-June 7, 1986

III. GENERAL MANAGEMENT SEMINARS

- Finance for the Professional Manager** Mpls./
St. Paul location; four times a year. Upcoming sessions—June 11-13, 1986
- Marketing for the Professional Manager**
Mpls./St. Paul location; four times a year.
Upcoming sessions May 28-30, 1986

Information Request Form

_____ Yes, I am interested in more information on the seminars I have indicated above.

_____ Yes, Please ADD MY NAME TO THE EXECUTIVE DEVELOPMENT CENTER LIST to receive brochures on individual seminars as they are published.

NAME _____ TITLE _____ ORGANIZATION _____

STREET _____ CITY _____ STATE _____ ZIP _____ COMPANY PHONE () _____

SEND TO: Executive Development Center, School of Management, University of Minnesota, 271 19th Ave. S., Minneapolis, MN 55455.

Or PHONE (612) 373-3837.

MINNESOTA MANAGEMENT REVIEW

School of Management
University of Minnesota
271 19th Ave. S.
Minneapolis, MN 55455

ADDRESS CORRECTION REQUESTED

Nonprofit Org.
U.S. Postage
PAID
Minneapolis, MN
Permit No. 155

M00030641 B 04 2
UNIVERSITY ARCHIVES
UNIV OF MINN, 10 WA LIB
117 PLEASANT ST S E
MINNEAPOLIS, MN 55455

Minnesota Management Review

School of Management, University of Minnesota

September 1986
Volume 5, Number 3

Curt Carlson

“I wanted to get into business. I don’t know why, but it was just born in me, and I knew that about myself.”

With this feature profile on Curtis L. Carlson, the Minnesota Management Review begins a series on School of Management alumni. Carlson is the quintessential business success story - a first-generation Swedish-American who built a creative idea into a small business that has grown to a \$3 billion a year international conglomerate in hospitality, travel, and incentives. His personal wealth is estimated at \$700 million. Understandably Carlson is proud of his financial achievement. But he’s quick to remind anyone that money is not everything in life. Following is an excerpted November 1985 interview with Carlson by Tom Cassidy of the Cable News Network’s PINNACLE.

Working on his own, Curt Carlson has achieved legendary success the past 47 years, at least in part by simply understanding what it takes to motivate people, particularly consumers. Along the way he’s become one of America’s richest men in a full-fledged Horatio Alger story where a nine-year-old golf caddy discovers the joy of working hard and grows up to taste billionaire status. Today, 71-year-old Curt Carlson owns and operates the Carlson Companies, a service industry empire that ranks as the 13th largest privately owned company in America, with \$3 billion a year in sales and 40,000 employees.

Curt Carlson was born in Minneapolis in 1914, the son of Swedish immigrants. After graduating with a degree in economics from the College of Business Administration at Minnesota, he went to work for Procter & Gamble (P&G) as a soap salesman. While working for P & G, Carlson, at age 24, founded the Gold Bond Stamp Company. Before long, Carlson’s trading stamp concept caught on and he was on his way, using his Gold Bond operation to diversify to a number of other service businesses like the Radisson Hotel chain. The new \$104 million downtown Minneapolis Radisson will be the centerpiece of Carlson’s hospitality business. His travel division includes the Ask Mr. Foster Travel Agency. He also runs the popular restaurant chain “TGI Fridays” and the world’s largest incentive company, The Carlson Marketing Group.

CARLSON: I knew I didn’t want to be a professional man of any kind. I wanted to get into business. I don’t know why, but it was just born in me and I knew that about myself. I wasn’t sure what business, but I had worked with Procter & Gamble and had done well there and was highly accepted. The thing that thrilled me was the idea of earning the dough for myself rather than

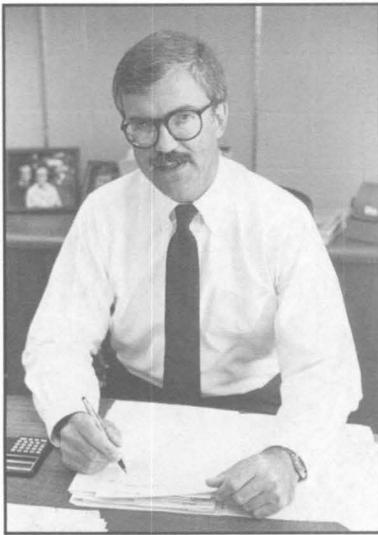


working for someone else. I can remember when I got my first paper route and I made \$15 a month. It was in the late '20s and getting \$15 a month, compared to not getting anything, well it’s like a whole new world. Climbing the ladder gives you the freedom to do what you want to do.

PINNACLE: What about the day your mother caught you napping at the bus stop?

CARLSON: I always caddied after school and on Saturdays. One Saturday I was really tired. I fell asleep while waiting for the streetcar. When my mother came by and spotted me there, I told her I didn’t think I was going to go out and work that day. Boy! She let me know in no uncertain terms that this was not the way we did things. She taught me a powerful lesson that I still remember. Never mind how you feel. You go to work and after a while you forget about how you feel.

Carlson to page 4



Preston Townley

Dean's Message

Perhaps the most precious award an educational institution can give a faculty member is tenure. It is not taken lightly since it is literally a lifetime commitment of support. The process by which the individual achieves tenured status is a most demanding one at the School of Management and the University of Minnesota. I have participated with growing admiration for the process during my first two years as dean. I want to devote this column to the subject because it is such a critical part of this school's life and because it is clear that so many outside the academy either misunderstand it or honestly oppose it.

Why tenure? Academic freedom ensuring the output of research and teaching free from the inhibitions of political controls or philosophical directives lies at the heart of the answer. Presidents, deans, overseers/trustees, legislatures, etc. change; if academic inquiry and presentation of views were directed to change with these shifts, interruption of research lines or haphazard curricular modifications might be just two of the less disruptive impacts. But we don't often debate this philosophical base for tenure; instead, critics argue that the institution breeds complacency. It clearly is not without its faults but my view is akin to Churchill's concerning democracy as a form of government, "It is the worst except for all others." The challenge is to make the best possible decisions in the granting of tenure, stimulating life-long productivity rather than facilitating atrophy.

We recently completed the promotion and tenure decision process for the past academic year. I am very pleased with the results in the School of Management. The following have been promoted from assistant to associate professor and granted tenure: Dennis Ahlburg, industrial relations; Gordon Duke, accounting; Barbara Loken, marketing and business law; and Gary Scudder, management sciences. In addition, associate professor Harold Angle was granted tenure in strategic management and organization, and John Fossum was promoted from associate professor with tenure to full professor in industrial relations. Each candidate survived a long and demanding process.

Their research records, teaching performance, and service contributions were first clearly evaluated and voted upon by their department colleagues. Recommendations then were forwarded to a school-wide committee composed of one tenured faculty member from each department. This Faculty Appointments and Promotion Committee began long hours of evaluation and discussion. They read and evaluated research publications. They solicited referees from other academic institutions, who also read and commented on the individual's research and the merits of his/her candidacy. Departmental and student teaching evaluations were assessed and the candidate's contributions to the school, his/her discipline, and to community service were considered as well. The committee then voted and expanded upon the vote and its views on each candidate in a long meeting with the dean and associate dean.

By this time each candidate had a hernia-sized folder going forward with research publications, reviews, evaluations, and votes. Next the full-tenured faculty met openly, discussing each folder and the recommendation of the committee.

Often, participants vigorously debated viewpoints. A vote was then taken on each candidate and communicated as a recommendation to the dean. The dean then decided whether or not to recommend tenure and promotion. That recommendation went to the university's vice president of academic affairs for final decision.

Dean to page 5

Minnesota Management Review

Published by the School of Management,
University of Minnesota,
Minneapolis, Minnesota 55455.
Third-class postage paid at Minneapolis.

Anne M. Benisch
Associate Dean, External Affairs
(612) 625-0749

Jeanne Katz
Director, Alumni and Development
(612) 625-1556

Julie Heupel
Director, Corporate Relations
(612) 625-9538

Tim Rummelhoff, Photographer
Darlene Gorrill, Layout

Deb Stika, *CENTERLINE* designer

Laurel Christianson, Special Assistance

The University of Minnesota is committed to the policy that all persons shall have equal access to its programs, facilities, and employment without regard to race, religion, color, sex, national origin, handicap, age, veteran status, or sexual orientation.

New marketing textbook blends theory with real-life examples

How does a professor breathe real-world examples, applications, and cases into a basic marketing textbook?

The answer, according to marketing department's William Rudelius, is to ask Minnesota businesses and School of Management alumni and friends to help. "Without their help," comments Rudelius, "we'd have written just another me-too textbook. With their serious involvement, our book has a critical point of difference relative to competitors."

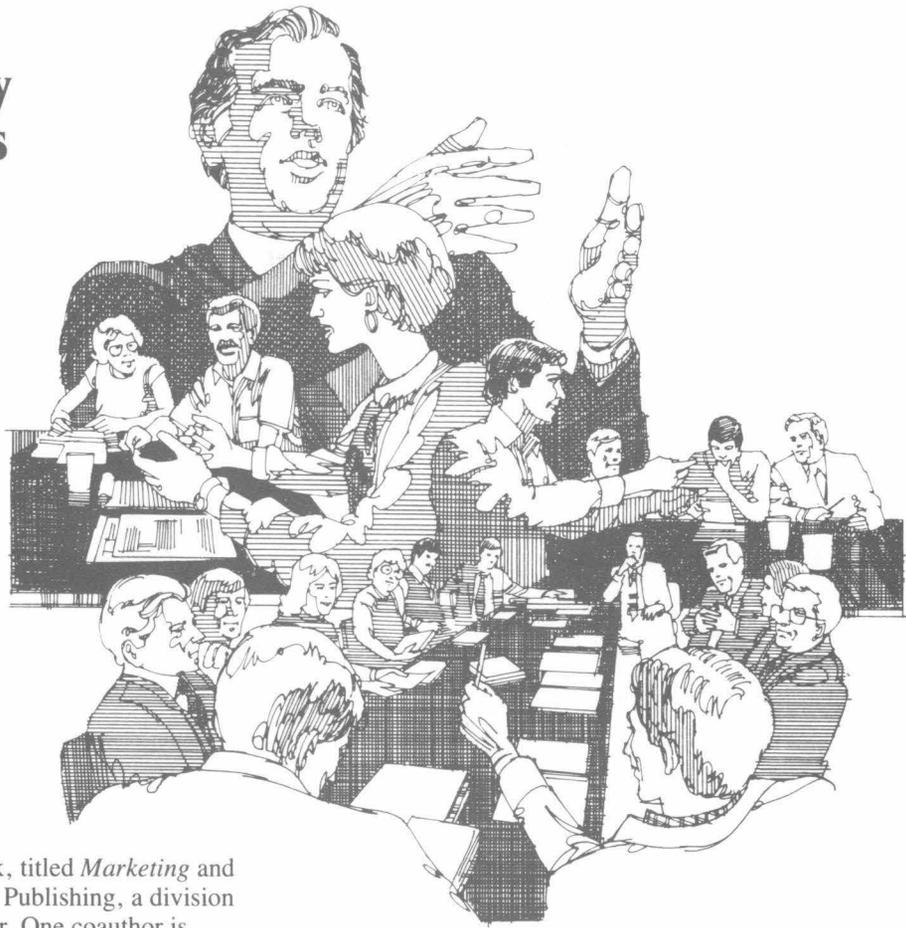
How the Book Came About

Rudelius has two coauthors on the textbook, titled *Marketing* and published by Times Mirror/Mosby College Publishing, a division of the *Los Angeles Times Mirror* newspaper. One coauthor is Eric N. Berkowitz, a SOM faculty member for eight years and now chairman of the marketing department at the University of Massachusetts at Amherst. The other coauthor is Roger A. Kerin, chairman of the marketing department at Southern Methodist University. Kerin, too, has a strong Minnesota connection. After getting a BA degree at U of M-Duluth, he received both an MBA and Ph.D. in marketing from the SOM. The three-author team has specialties within marketing that complement each other in writing the text.

Three years in preparation, the text went through an incredibly detailed review process, Rudelius notes. This included focus groups with marketing instructors and students, about 2,000 pages of review comments of two drafts by 45 instructors who teach the basic marketing course, and class testing of a photocopied, typewritten draft of the book by a marketing class at Hamline University. "The class members kept their sense of humor when they waded through the foot-high draft of chapters," Rudelius says. Their well-deserved reward: a complimentary copy of the actual book.

The Package

In basic college courses like economics, psychology, accounting, and marketing, the textbook itself is only the tip of the iceberg of materials provided to instructors who adopt the textbook. Other standard pieces that are part of the *Marketing* package include a student workbook and an instructor's manual that contains



detailed lecture outlines, "teaching-note" answers to problems and cases, and transparency masters of textbook tables and figures.

In addition, the package includes 100 color acetate transparencies and 2,000 hard-copy and computer disk test items that can be edited as desired by the instructor. A key point of difference is four supplementary cases that can be handed out to a class of marketing students who can compare its solutions to those described on a videotape by the marketing manager involved in the case.

Minnesota Business Connections

Both large and small businesses provided information that appears in the text examples and cases, some of which came about in unusual ways. Speakers in Rudelius' MBA New Products class provided several ideas that appear in the book. When SOM Dean Preston Townley described the new product process at General Mills, he mentioned that the idea for Nature Valley Granola Bars was sparked by a marketing manager's observation of coworkers carrying granola cereal to work in little plastic bags and eating it as a snack. Earl Bakken, Medtronic's founder, showed the class a checklist he used to screen new product ideas for medical devices. Both examples now appear in the new product chapters of the book.

Marketing to page 10

Carlson from page 1

PINNACLE: You always had paper routes, you worked your way through college. It seems you never stopped working.

CARLSON: No, but it's never bothered me. I think that the most wonderful gift that parents can give their children is to have them work so they don't mind working, they kind of like it. It should become more important than just play.

That work ethic earned Curt Carlson his first job as a soap salesman for Procter & Gamble. He was earning about \$110 a month, considered good in those days, but Carlson wanted more. Working for P & G, he discovered that he could increase his sales substantially by persuading drugstore merchants, his customers, to sell his soap below cost as a loss leader to lure their customers to the store to buy other things. The idea was a smash success.

CARLSON: As a result, without working any harder, with all these Twin Cities drugstores selling soap, I became one of two salesmen with the highest percentage increase. We each got a gold watch. That's where I learned the value of incentives, which has been my forte and what started my company. My wife Arlene liked to show off that watch whenever we were out. It read, "Procter & Gamble, 1938, High Man, Curt Carlson." Perhaps they paid \$20 for that watch. But you can't take out a \$20 bill and show it around. People want something tangible.

Carlson says he always yearned to be an entrepreneur, but even with that inner ambition, it took an idea to finally get things moving. An inquisitive young man, Carlson asked his mother about the red stamps she had received with her department store purchase. She explained how she filled a little book with stamps and redeemed it for \$2 in cash—a way for the store to pay its customers for their loyalty. Carlson thought hard about that. He was working primarily grocery stores for P & G. If it worked this well for department stores, he could well imagine what it would do for grocery stores.

CARLSON: It's the little decisions that you make in a life that sometimes end up being very big. This happens to everybody. You look back at some little thing that you did and how it influences your whole life. When I put that campaign together, I was thrilled and excited. I could hardly sleep at night until I tried it out on a grocer and found I could sell it.

Finally persuading one local merchant to participate in his stamp program, Curt Carlson and his big dreams were on their way to being realized. After getting the entire store ready for the promotion, Carlson stole back at night with Arlene. Peeping through the windows, he showed her all the signs inside and told her if it would sell there, he'd sell a million of them because there were a million grocery stores around the United States.

PINNACLE: And did you believe at that point that it would work?

CARLSON: I sure believed that it would. I knew that if it did work, there was no end to where I could go with that plan.

PINNACLE: Carlson's business began to grow, but at one point when promotion was scarce, he needed a loan to have a sign painted.

CARLSON: The banker, an old family friend, said, 'Curt, you could have stayed with Procter & Gamble, a marvelous company. You could be there for the rest of your life, a good company, and you go off on a damned fool stunt like this.' He told me I should have my head examined. 'I'm not going to encourage you by

Carlson's gift benefits school

Prominent Minnesota businessman Curtis L. Carlson's magnificent \$25 million leadership gift to launch the University's "Minnesota Campaign" will largely benefit the School of Management.

Eighteen million dollars will go toward building the school—people, not bricks and mortar. Resources will go to three chair endowments, four senior professorships, faculty recruitment/retention funding, research, and student aid. In addition, a special advancement endowment will make possible new initiatives for the school in such areas as international education.

"One can easily fall into hyperbole with a gift of this magnitude, but the reality is that this gift combined with a solid base of legislative and tuition support can enable achievement of the school's goal of reaching the ranks of the top five public university business schools by the 1990s," said Dean Preston Townley. "We are pushing for no less."

Under the terms of the release of the Permanent University Fund (PUF), each endowed chair will be matched on a one-for-one basis. The school anticipates a payout of 5 1/2 percent of endowment earnings for chairs (the balance of earnings will enable growth in the underlying endowment and provide future payout growth). The larger the endowment, the more that can be done with the chair—going behind support of the holder to building research programs and funding junior faculty in the field of the chair.

Chair number one under the Carlson gift will help establish a focus for entrepreneurial study at the school. The Carlson chair in entrepreneurial studies will be funded with \$2 million (\$1 million from Carlson and \$1 million from the PUF). Townley said the school hopes to structure this undertaking this year and begin recruitment of a chair holder early next year. "This is an area in which we can do much both to advance study and to serve the state's economy and its many nascent business leaders," he added. "Who better to provide the means and the identity for this chair than Curt Carlson, Minnesota's number one entrepreneur."

giving you any more money on that, or giving you any money,' he said. So I went on. Every time he saw me up until the day he recently died, he'd say, 'Oh, I'm so sorry I misjudged you so much.'

PINNACLE: Despite a string of early skeptics, Curt Carlson succeeded by sticking with his instincts. He says it was the key to making success happen.

CARLSON: I believe that, at the least, the entrepreneurial tendency has to be more or less born in an individual. It's that coupled with supreme confidence, not arrogance, that keeps one going when the chips are down. But that's only about 10 percent of success. The other 90 percent comes from knowing what you're doing.

Curt Carlson's success could be considered a just reward for a visionary. For nearly 50 years he's been able to maintain a special working relationship with consumers by keeping incentives in their lives, also by delivering an array of services. Curt said the toughest part was just getting started.

CARLSON: You know the old saying, 'once begun, it's half done.' If you've got a dream, start it, and then you'll get smart over time. You've got to keep improving. Now I've got a program that became pretty sophisticated because it isn't just a case of a man giving out stamps. It was a phenomenon, and still is, of a promotional device that swept the whole country.

PINNACLE: Did you always know you'd be as successful as you are today?

CARLSON: Never think about being successful. Before the war, I'd write down how much I wanted to make a week and put it in my pocket. I wanted to make \$100 a week. Many people would laugh at that today, but \$100 a week was like \$5,000 a week back then! You'd be considered pretty successful and you could live pretty nice in those days. I continued to do that as I got more, so that it was always uppermost in my mind. But, we no longer put down a dollar amount. We put down exactly what we want to accomplish by the end of the year, written down on a month-by-month basis. I know of no other way to be successful.

PINNACLE: You're a maestro at spurring people on. How do you motivate people to stretch, to be more?

CARLSON: Motivation is almost everything. That's our big business now. E.F. McDonald Co. is the largest motivator in the world. And it's back to my original theory—that a watch or something tangible is much better than just giving more money. They'll take money and pay a bill and then they've promptly forgotten it. But, give them a plaque or, today's big motivator, a trip. People love to travel. So if they know that by the end of the year that they and their spouse can take a nice trip and it's all paid for, they'll work. They'll get out early Monday morning and stay later on Friday night, out there doing what you want them to do.

PINNACLE: Do you take pride in getting people to be more?

CARLSON: Yes and they take pride in themselves. The staff at "TGI Fridays" take courses on being good at everything—a good waiter, a good waitress, and all the things that go with it. They get little buttons that recognize their accomplishments. Their peers see the buttons and they become a big shot. If they have five or six buttons that means they're a master bartender, master waiter, master on accuracy, and so forth. It's a status symbol.

PINNACLE: One of the things that you've had difficulty doing is firing people. How can a big boss like you, very successful, still have trouble firing people?

CARLSON: You can't forget where you came from. You've got to remember that if you're going to be a human being. I know how much it means to lose a job.

I'll be working to ensure that my grandchildren become gainfully employed and that my wealth does not become a handicap to them—a handicap that I never had to bear in my youth. Destroying young people's ambition is a disastrous act. Never make a trust fund more appealing than an honest day's work. I need that need-for-work environment as well. The carrot in front is good. But it's the whip behind that sets one on the right course.

If the scoreboard in business is your financial worth, the scoreboard in my personal life is marked by my wife Arlene, my two daughters, and seven grandchildren. I have high hopes that all will grow up with as much happiness as possible. □

Dean from page 2

The process described runs early fall to mid-spring. But the record presented must be established over many years. New, or probationary, faculty have a six-year probation period. Since the process begins early the sixth year, the research and teaching record must be assembled within five years. Clearly the pressure is on throughout that period. The culmination is an up-or-out decision.

What are colleagues and administrators attempting to assess? Simply stated, it is a judgement about the individual's productive potential over a long career. A research university's mission is to advance knowledge. Hence, the research component of the tenure decision weighs the heaviest. And most important in evaluating the research, colleagues seek the judgement of peers and leaders in the candidate's field. Hence, research published in refereed journals ranks highest.

This research orientation seems to perplex outsiders the most. Often I hear lamentations about ignoring teaching in favor of research. That is not my intention in making my evaluation; what I seek is balance. Outstanding researchers can and should be outstanding teachers. In this school they quite often are. On the other hand, strong teachers may not be terribly productive researchers. But in making the tenure decision, we judge the future. I am influenced by the view that faculty who are productive researchers are the best bets for continued growth and remaining excited about their fields. Through this they are then most likely to stimulate and challenge students. Being involved in advancing knowledge better assures that vitality on which one bets with the granting of tenure.

"Why tenure? Academic freedom ensuring the output of research and teaching free from the inhibitions of political controls or philosophical directives lies at the heart of the answer."

Lastly, let me comment upon how one manages under the tenure system. One of the comments I frequently receive is, "It must be a real change for you from the business world what with all the tenured faculty you can't do anything about." Tenure, indeed, does appropriately provide protection, but it does not remove all incentive tools from "management." In any tenure system there is some "dead wood;" it is the management challenge to keep this pile to a minimum and continually strive to stimulate faculty whose productivity has ebbed. New assignments, economic incentives, and collegial pressures are all tools available. Tenure does not mean automatic wage progression. Tenure does not protect against approbation from colleagues. It is security but not sinecure. It is special to this type of institution and critical for its success. It is not granted lightly and be assured that the outstanding young faculty cited above look like very good bets for long-term productive futures. I am proud to be associated with them. □



School offers new evening master's in industrial relations program

One of the most significant recent developments for the Industrial Relations Center is the inauguration of the evening Master of Arts in Industrial Relations (EMAIR) program. This program was launched to meet the growing needs of the Twin Cities industrial relations community for broadening the available base of professional development opportunities in personnel management, labor relations, and policy development. The IR graduate faculty goal is to ensure that the EMAIR program shares in every way the national reputation and prestige enjoyed by the regular MAIR program.

Developing the Program

In fall 1983, the IR graduate faculty expanded the credit hour requirements for the MA in IR degree from 44 to 64 quarter credits. This increased the required IR courses to eight, and the total degree program to 16 courses (12 in IR and 4 in related fields). Further, it required a computer-based Plan B paper to be tied into the program's course in applied statistical analysis (IR 8001). Students could enter the program fall and spring quarters only. While these curriculum changes created a substantially

stronger degree, they also reduced the possibility of an employed person being able to achieve a degree during the daytime, said John Fossum, IRC graduate studies director.

Further, since the mid-1970s, a great deal of interest developed in the community to offer an evening version of the MA in IR program, Fossum said. However, he added, an evening program was not offered because resources were unavailable internally to launch a program at a quality level equivalent to the day program—an alternative the IR graduate faculty was unwilling to consider. "We strongly believed, though, that if the program could receive some initial subsidies, it would be successful and soon become self-sufficient," Fossum said.

In the fall of 1984 University President Kenneth Keller agreed with this thesis. Shortly thereafter, Keller, School of Management Dean Preston Townley, and IRC Director Mike Bognanno worked out the details that launched one of the university's newest graduate programs, an expansion that is consistent with Keller's "Commitment to Focus" program, Fossum noted.

EMAIR to page 15

The hard stuff, the soft stuff, and the really difficult task

by Norman L. Chervany

The continuing debate in schools of management on whether the curriculum should emphasize the technical-analytical courses (the hard stuff) or the human systems courses (the soft stuff) goes on.

In an article entitled "M.B.A.'s Learn a Human Touch," *Newsweek* (June 16, 1986) stated:

For many of the estimated 70,000 M.B.A. students graduating this year, the "numbers" are still the bottom line. Subjects like finance, marketing and economics remain the core of the M.B.A. curriculum, and proficiency in them is the ticket to fat salaries in hot fields like investment banking and consulting. But, alarmed by the narrow focus and dubious ethics of many recent B-school graduates, such as those involved in recent insider-trading scandals, many schools are trying to broaden and "humanize" their course offerings...

It's all part of the growing belief that "the science of business is a myth... and the human challenges [of management] are gargantuan," says John Kotter, professor of organizational behavior at Harvard Business School. As people rise in the corporate hierarchy, concurs Burton Malkiel, dean of the Yale School of Organization and Management (SOM), "it's less important that they have all of the technical details"—and crucial that they have the capacity "to deal with and motivate people." But with the growing competition among M.B.A.'s for jobs, most management schools have usually emphasized hardcore technical training at the expense of "softer" areas like human resources.

From my perspective, the debate has caused people to focus on the wrong question. The question is not "What's more important, the hard stuff or the soft stuff?" The truth of the matter is that they are both important. The real question is, "What's the appropriate balance between them and how do we do both well?" Furthermore, this question is directed at both schools of management and employing organizations.

Recognizing the question is not enough. The "really difficult task" is how to develop a workable answer.

From the perspective of a school of management there are two serious challenges in accomplishing this task. First, we need to recognize that the normative prescriptions for how to deal with problems involving the human animal are not as precise as normative prescriptions in how to evaluate a potential acquisition. But—and here's the catch—this relative lack of precision does not mean that the material is not as important. We must avoid the insidious trap of teaching what can be explained precisely. We need to teach what is important, be it precise or not.

A second challenge is to avoid the response that "learning how to work with people is something that can only be gained from on-the-job training. On-the-job training is necessary for refining all skills—hard or soft. But, the purpose of formal classroom education is to provide the concepts that can be used to understand, organize, and learn from on-the-job experiences. For



schools of management to put the burden of responsibility for education and development in the human systems area in employing organizations is a cop-out.

The challenges to the task, however, are not solely the responsibility of schools of management. The challenges also rest with the employing organizations. You need to make it unambiguously clear to prospective MBA recruits that both the technical skills and the human behavior skills are important. You need to say this in your recruiting materials and presentations. And, most importantly, you need to say it with your hiring actions. MBA graduates understand the marketplace. If you hire and reward people with the balanced set of skills, future graduates will acquire this balance in their education programs. If you don't, future MBA graduates will also know how to respond.

Both parties in this task know the issue. The question is how will we respond. □

Norman L. Chervany is professor of management sciences and director of professional management programs at the University of Minnesota School of Management.



Norman L. Chervany



Alumni and friends gather for 1986 Business Day

Corporate citizenship:

B-Day participants focus on business ethics

Announcement of alumnus Curtis L. Carlson's \$18 million gift to the School of Management culminated a highly successful 26th annual Business Day April 17 at the Radisson University Hotel. Presentations by Carlson and Elmer L. Andersen, former Minnesota governor and chairman of the H.B. Fuller Co., highlighted the day of academic and corporate exchange which was sponsored by more than 60 area companies. More than 1,000 people attended Business Day, the school's annual event that brings together students, corporate representatives, alumni, faculty, and staff. Business Day was planned and implemented by the Executive Planning Committee comprised of undergraduate and graduate students and their subcommittees. This year's theme was "BUSINESS ETHICS: Black and White or Shades of Gray?" Participants explored the ways business and education can cooperate to continually improve the workplace, business decision making, and corporate citizenship.

Speaking to the day's theme, Carlson said that those who have benefited from public education have an obligation to return something to it. Carlson, chairman of the Carlson Companies,

delivered the evening keynote address, "Corporate Responsibility for Education." "If we want to compete in the world marketplace, we need quality education," Carlson said. "We can't do it on the cheap. I've been in business long enough to learn a basic lesson: You get what you pay for."

School of Management Dean Preston Townley kicked off the day's festivities, reading a special governor's proclamation that commemorated Business Week '86, highlighting April 17th as Business Day. In the proclamation, Governor Perpich lauded Minnesota's business community for its leadership in developing a strong code of business ethics and in promoting and demonstrating corporate social responsibility. He called on all Minnesotans to show their support of and commitment to ethics in business by examining the moral implications of their business decisions and incorporating sound ethical practices into their daily business dealings.

Elmer L. Andersen, whose name is synonymous with corporate and social responsibility, stressed his strong convictions on business ethics. He called a basic business philosophy fully as

B-Day to page 23

Business Day '86 Corporate Sponsors

ADC Telecommunications, Inc.
 American National Bank
 Arthur Andersen & Co.
 B. Dalton Bookseller
 Charles Bailly & Company
 Bemis Company, Inc.
 Cargill, Inc.
 Carlson Companies, Inc.
 CENEX
 CPT Corporation
 Cray Research
 Dain Bosworth, Inc.
 Data Card Corporation
 Dayton Hudson Corporation
 Deloitte Haskins & Sells
 Deluxe Check Printers, Inc.
 Donaldson Company, Inc.
 Economics Laboratory, Inc.
 Ernst & Whinney
 First Banks
 First Bank System, Inc.
 FMC Corporation/Northern Ordnance Division
 H.B. Fuller Company
 Gelco Corporation
 General Mills, Inc.
 Grant Thornton
 Honeywell, Inc.
 IBM Corporation
 IDS Financial Services, Inc.
 KMG Main Hurdman
 Kraft, Inc.
 Lamaur, Inc.
 Larson, Allen, Weishair & Co.
 Mayo Clinic
 McGladery Hendrickson & Pullen
 MTS Systems Corporation
 National Car Rental System, Inc.
 National Computer Systems, Inc.
 Northern States Power Company, Inc.
 Northwestern Bell
 Northwestern National Life Insurance Co.
 Norwest Corporation
 Peat, Marwick, Mitchell & Co.
 Pentair, Inc.
 The Pillsbury Company
 Piper Jaffray & Hopwood, Inc.
 Price Waterhouse
 Republic Airlines, Inc.
 Rosemount, Inc.
 St. Paul Pioneer Press and Dispatch
 Soo Line Railroad Company
 Sperry Corporation
 Super Valu Stores, Inc.
 Target Stores
 3M
 Touche Ross & Company
 Arthur Young & Company

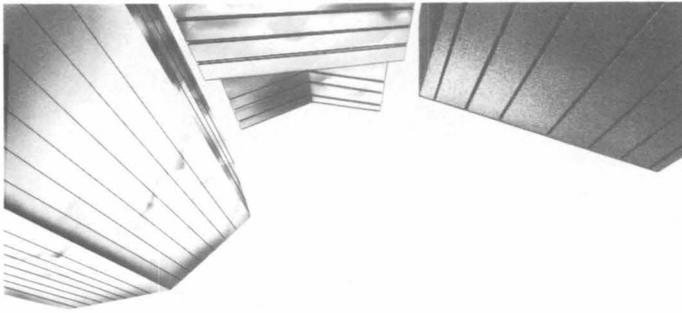


Elmer Andersen

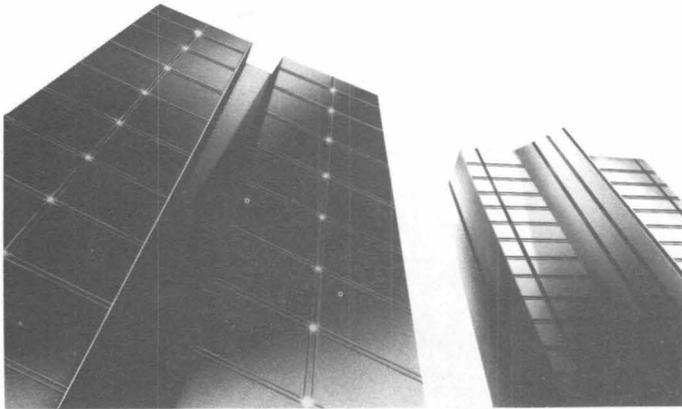


Curt Carlson (left) and Dean Preston Townley (right)





“Without the quick responses to our frantic calls for help from many former SOM graduate students, we wouldn’t have met our deadlines.”



Marketing from page 3

Honeywell’s Optoelectronics Division and 3M’s Package Systems Division both provided cases for the text. The Honeywell case involves a search for commercial applications for fiber optic technology. The 3M case was written by Susan Narayan, who was one of the four students on an MBA 8065 field project team three years ago that surveyed 100 food companies about their tamper-resistant packaging needs following the first Tylenol packaging deaths.

Cray’s supercomputers illustrate the rates of technological change (described in the chapter on environmental factors) that today’s marketing managers face. The data and picture, found by evening-MBA Judd Larson, point out that while the IBM PC on your desk is fast at 0.001 megaflops (millions of floating point operations per second), the CRAY-1 is 100,000 times as fast (at 100 megaflops) and the target for the CRAY-3 due out in 1987 is 5000 megaflops—five million times the speed of today’s IBM PC.

Former SOM MBA students at Pillsbury—Cathy Brink, Craig Britton, and Jan Tritsch—supplied examples of new product testing and an organization chart showing how its product managers work with other units in developing new products. To give an integrated view of the strategic marketing process, Steven Rothschild of General Mills describes the successful introduction of Yoplait yogurt both in the text and in a videotape.

Minnesota’s small businesses also were sources of actual marketing situations. Jane Westerlund, owner of The Caplow Company in south Minneapolis, supplied marketing and financial data

about her custom framing shop that became a complete appendix on “Financial Applications of Marketing.” Starting with an MBA 8065 project from Alternative Pioneering Systems, David Dornbush and Chad Erickson describe in the text and in a videotape case how their start-up firm succeeded in marketing its home food dehydrator through Montgomery Ward.

SOM MBA alumni Paul and Ruth Stormo, through a division of their Artograph firm, provided the system that produced the book’s striking four-color computer-generated charts and graphs. And small-turned-large advertising agency—Fallon McElligott Rice—supplied case material, videotape interviews, and pictures of print and TV commercials that show why it won *Advertising Age* magazine’s award for “1983 Advertising Agency of the Year.”

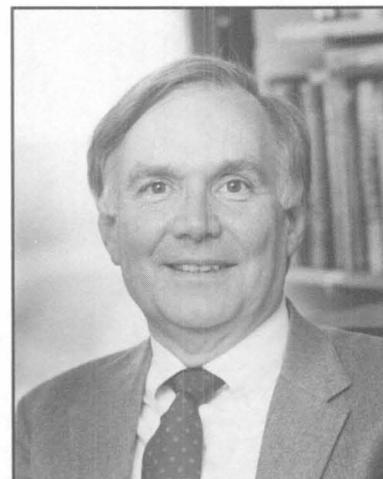
SOM Alumni Connections

As with many new-product launches, a new textbook package involves integrating countless details. “Without the quick responses to our frantic calls for help from many former SOM graduate students, we wouldn’t have met our deadlines,” Rudelius says. James C. Cross of Arizona State University and Jane Franke of Intellisense, Inc. wrote the chapters on physical distribution and international marketing, respectively. Marcia Lee Agee of Hamline University wrote parts of the instructor’s manual and test bank and tested the draft on her marketing class. Jeanne Buckeye of St. Thomas College organized and edited the glossary. Alan J. Dubinsky of the SOM and Steven W. Hartley of the University of Denver coauthored the test bank and an appendix chapter on “Marketing Careers.”

Efforts and Results

When asked, Rudelius insists, “No more textbooks from scratch.” This clearly doesn’t preclude revisions of the book. But he estimates he spent more than 3,000 hours on the various elements in the package. This time includes an unpaid leave of absence fall quarter 1985, spent in an unfurnished house in Amherst, Mass., writing chapters to make up lost time.

The book was issued in January 1986. “It’s doing great,” says Beth Lewis, marketing director for Times Mirror/Mosby. “Our research shows that it has sold more copies than any first-edition business textbook published in 1986.” □



Bill Rudelius

Honeywell starts fellowship for minority and disadvantaged students

School of Management officials and executives from Honeywell, Inc., met recently to discuss ways of increasing the numbers of minorities and disadvantaged persons within the MBA program. Those discussions proved fruitful, prompting the creation of a new fellowship program at the school.

Honeywell has established the Honeywell Fellowship for Minorities and Disadvantaged Students in Management. The new fellowship will provide financial support to minority and disadvantaged students enrolled full time in the regular two-year MBA program.

The fellowship was initiated by Louis E. Navin, Honeywell vice president and chief financial administration officer corporate. Initially, there will be a \$4,000 contribution for one two-year minority or disadvantaged full-time MBA student. After the first year, the annual contribution from Honeywell will increase to \$8,000, which represents \$4,000 for a fellowship renewal for a second-year MBA student and \$4,000 for a first-year MBA student.

In addition to financial support, whenever possible, Honeywell

will hire fellowship recipients as summer student aides during the first year of a student's MBA program and also during their second academic year.

"This fellowship will provide minorities and disadvantaged MBA students with educational and career opportunities that may never have been possible without the program," Navin said. "Honeywell is pleased to make the fellowship available and enthused about the positive impact it will have on the Minnesota MBA Program."

The University of Minnesota Foundation will administer the Honeywell Fellowship for Minorities and Disadvantaged Students in Management. A committee composed of representatives from the MBA program and Honeywell's Corporate Finance Department will select recipients. They will be awarded the fellowship based on academic credentials and potential.

"This cooperative effort between Honeywell and the School of Management represents a very positive step, a step we are all very excited to take," said School of Management Dean Preston Townley. □

Prudential Insurance selects two for accelerated program

The Prudential Insurance Company selected two School of Management BSB '86 honor graduates for its accelerated career entry program for bachelor degree candidates.

Troy Griep and Stacia Herman recently joined 18 other outstanding graduates from top business schools around the country in the Prudential Accelerated Career Entry Program (PACE).

Unlike investment bankers' "deferred admit" programs for students who wish to seek an MBA two or three years later, the 30-month PACE program provides that option while emphasizing the opportunity for continuing to work as a member of the company's investment staff, explained Dave Dovenberg, regional vice president, Pru Capital, Minneapolis. Initially, Stacia and Troy will divide their time between investment education and rotations in the various investment departments working on projects and gaining experience in possible investment paths.

Thereafter, they'll rotate full time in the seven investment areas and eventually be placed in one area to pursue their careers. This structure enables participants to contribute and succeed in a highly demanding environment, Dovenberg noted. PACE is a unique opportunity for students who are interested in a financial career, but are not certain about which specific discipline they wish to pursue, he added.

Prudential interviewed about 850 students from a wide variety of disciplines from schools like Princeton, Yale, Harvard, Stanford, and Cambridge University in England. Wharton was the only other business school selected. While the program is open to all disciplines, Pace looks for course work in economics, financial accounting, corporate finance, and computer operations. "The business and liberal arts people really stretch one another as well

as complement the company's emphasis," said Prudential's Mary Kay Strangfeld.

"We picked Minnesota because of its solid reputation among business schools," Dovenberg said. Dovenberg, who is a Minnesota alumnus, has recruited School of Management MBA's for six years. He noted that Prudential has been delighted with '85 Minnesota BSB grads and PACE participants Joe Axtell and Phil Hildebrandt. Strangfeld added that the company likes Minnesota's continued insistence on a strong liberal arts background and effective communication skills.

Dovenberg cited the strength of Stacia's and Troy's academic performances and work experience, but also liked their strong technical and interpersonal skills, presence, personality, and maturity. He lauded their demonstrated high levels of ability and motivation, as well as their capacities to work well with peers.

The type of career track positions offered by Prudential are typically filled by MBA's, according to Dovenberg. "In the long run, talent, motivation and judgement are the dominant factors in career success," he said. "They can be identified almost as well in bachelor's level candidates as in MBA's." Distinguished academic performance demonstrates a strong ability to learn and can be transferred to allow participants to move quickly and comfortably in one of the company's investment areas, he said.

After the training program, if Stacia and Troy wish to locate in one of Prudential's regional offices in a major U.S. city, this opportunity is available subject to a suitable job opening. PACE is an added resource for hiring outstanding employees, Dovenberg said; it's well worth the investment. □

Faculty News

New Appointments

Cynthia M. Beath was hired as an assistant professor in management information systems. She received her doctorate from the University of California, Los Angeles. Beath joins the school this fall.

Philip Bromiley, assistant professor of strategic management and organization, was elected program co-chair for The Institute of Management Sciences, College on Organization.

Gene Daniels, director of private sector programs for the labor education service, was elected treasurer of the University and College Labor Education Association.

Jack Gray, professor of accounting, was appointed president elect of the Viking chapter of the National Association of Accountants.

Julie Erickson Heupel, formerly with Norwest Corporation, was appointed director of corporate relations for the school.

Michael Houston, formerly McManus-Bascom Professor of Marketing at the University of Wisconsin-Madison, was appointed department chair and research professor in marketing.

Jeanne Katz, former assistant director of alumni relations, was appointed director, alumni and development.

Gerald Rinehart was appointed director of undergraduate studies. Rinehart served as acting director prior to his appointment.

Peter Ring, associate professor of strategic management and organization, was appointed to the Research Committee of the Social Issues in Management Division of the Academy of Management.

William K. Smith, former vice president and director of transportation at General Mills, Inc., was appointed a senior executive fellow. Smith teaches, does research, and assists in development work in the school's logistics management area.

Detmar Straub was hired as an assistant professor in management information systems. He received his doctorate from Indiana University and plans to join the department this fall.

Shyam Sunder, professor of accounting, was appointed to the National Advisory Board of the Economics Science Laboratory at the University of Arizona. ESL is the first laboratory of its kind to conduct and promote experimental research in economics and management.

C. Arthur Williams, Jr., professor of finance and insurance, was appointed to the Editorial Advisory Board of *Insurance Review*. This new monthly magazine is published by the Insurance Information Institute.

New Grants

Graduate School to **Matt Anderson**, assistant professor of accounting, **Gordon Duke**, assistant professor of accounting, and **Shyam Sunder**, professor of accounting, to work on the university's Program for Developing an Experimental Markets Laboratory.

McKnight to **Philip Bromiley**, assistant professor of strategic management and organization, for an econometric study of the determinants of risk taking by Minnesota farmers and the effects of this on future economic performance.

Graduate School to **Lane Daley**, assistant professor of accounting.

Control Data Corporation to **Paul Johnson**, director of the Ph.D. Office and professor of management sciences, to support research on knowledge engineering and expert systems.

Graduate School summer fellowship to **Bob Ruekert**, assistant professor of marketing and business law, to study the development of synergies in marketing through acquisitions and mergers.

McKnight to **Paul L. Schumann** and **Dennis A. Ahlburg**, assistant professors of industrial relations, to study gender in wage determination.

University educational development to **Jim Scoville**, professor of industrial relations, to develop a course for the international relations program, focusing on work, society, and social change in industrialized countries.

Publications and Activities

Dennis A. Ahlburg, assistant professor of industrial relations, presented "Population and Economic Development in the Island Nations of the South Pacific" and "Crime, Unemployment, and Cohort Size" (with M. O. Schapiro) at the Population Association of America meeting in San Francisco. He spoke on demographic forecasting at the Sixth International Symposium on Forecasting in Paris. Ahlburg (with Helen Hughes and Sun-Hee Lee) has completed *Human Resources Development in Pacific Developing Countries* for the United Nations.

Richard Arvey, professor of industrial relations, and **Mahmood Zaidi**, professor of industrial relations and director of international program development, are conducting a study on cross-cultural perceptions of organizational justice.

Fred Beier, associate dean and professor of management sciences: "Marketing Planning: Status and Need in Small and Medium Class I Motor Carriers" (with James Cross), *Transportation Journal*, accepted for publication.

Mario Bognanno, professor and chair of industrial relations: *Labor Arbitration Awards: An Annotated Bibliography of Labor Arbitration*, Commerce Clearing House, Inc., January 1986. Bognanno is co-editor of *The Road to Improved Cooperation Between Labor and Management*, a report to the U.S. Secretary of Labor on the North Central Regional Symposium on Labor-Management Cooperation, December 1985.

Philip Bromiley, assistant professor of strategic management and organization: "Shareholder Value and Strategic Management," *Handbook of Business Strategy*, Warren, Gorham, and Lamont, accepted for publication. *Corporate Capital Investments: A Behavioral Approach*, Cambridge University Press. "The Use of Rational Systems in Bounded Rationality Organizations: A Dilemma for Financial Managers" (with Ken Euske), *Financial Accountability and Management*, accepted for publication.

CENTERLINE

NEWS AND NOTES FROM THE RESEARCH CENTERS

SEPTEMBER 1986

Mergers & Acquisitions:

Corporate marriages do differ

SMRC

Mergers and acquisitions. They've become a routine of the business world. Two companies become one—typically for the sake of the bottom line. Often, however, the marriage goes bad before the honeymoon is over.

Research conducted by two members of the Strategic Management Research Center (SMRC) sheds some light on the post-acquisition process—on why such unions often go awry. Four distinct types of mergers and acquisitions have been identified by David T. Bastien, an instructor in the Department of Speech Communication and a research associate at the SMRC, and Andrew H. Van de Ven, 3M professor of Human Systems Management in the School of Management and SMRC director.

The research, part of which has been published in SMRC discussion paper #46 entitled, "Managerial and Organizational Dynamics of Mergers and Acquisitions," challenges the previously held assumption that all mergers and acquisitions are the same organizationally.

In fact, Bastien shared that assumption when he began the study, three years ago. "I started out with the assumption that mergers and acquisitions are really one thing," Bastien says. "Initially I thought that I would be looking for neat and simple advice for managers about how to manage the business after the acquisition."



As the study progressed, however, nothing neat and simple emerged. Bastien was about to give up. "Nothing that we were getting was making any sense," he says. "Then, all of a sudden we realized we were looking at four different kinds of organizational relationships." With this realization, the data started to fall into place.

The four types of mergers and acquisitions are:

MERGER This describes a situation where two formerly independent organizations of similar size and affinity unite. The assumption is that the two organizations are co-equal so the integration process involves trying to merge the various levels and functions of the two organizations.

CONFORMATIVE ACQUISITION In this situation, one firm gains control of another and changes all systems and practices, yet it intends to maintain two separate hierarchies and identities. The acquiring firm tries to change the acquired firm—to make it conform to what

it perceives to be its own "superior" practices.

ADDITIVE ACQUISITION A larger firm gains ownership of a smaller firm that it perceives to be successful or have high potential. The acquiring firm does not attempt to change the acquired firm, although it does provide resources—usually cash—to foster growth and profitability.

ABSORPTIVE ACQUISITION A larger organization gains control of a smaller firm and strips that firm of its identity, management structures, and systems. Then it introduces its own systems by absorbing the acquired firm into its operations.

The knowledge that there are four kinds of acquisitions—not just one—enables the researchers to offer appropriate advice to companies going through the often rocky post-acquisition adjustment time. But, before they can offer advice, they also must study the unique cultures of the companies with which they are dealing.

Take the example of an additive acquisition. Company A, a larger company, buys smaller, but profitable, Company B. "Obviously, you want to leave them alone (Company B) as much as possible," Bastien says. But this does not always happen, especially if the managers and employees in each company have distinct cultures. That is, they have different dress codes, they have different decision-making processes, and they speak different languages. One company speaks in military metaphors. It refers to competitors as "the enemy" and says things like, "Will the troops go for it?" The other company talks about itself as "one big happy family" and calls the CEO, "Dad."

These differences are problematic. Bastien says the first step for any company, no matter what kind of merger took place, is to be sensitive to such cultural differences. Then, treat those differ-

Mergers to page 2

Land-grant universities forsake mission

STRATEGIC MANAGEMENT RESEARCH CENTER

The land-grant university has lost its way—in fact, it has lost its relevance, according to G. Edward Schuh, former head of the Department of Agricultural and Applied Economics and now director of Agriculture and Rural Development with the World Bank in Washington, D.C.

In a paper titled, "Revitalizing the Land-Grant University" (SMRC discussion paper #36), he takes the University and its academicians to task for forsaking the original land-grant mission. Then, Schuh, an agricultural economist, suggests six ways to get back on course.

The land-grant university, Schuh reminds us, was a 19th century innovation—a response to the elitism and limited relevance of the nation's private universities. Land-grant universities, such as the University of Minnesota, were to provide an upper-level education to the masses. They were to be places where new knowledge would be generated and then applied to society's problems.

The 20th century land-grant university has forgotten that mission and now frowns on applied work, Schuh argues. He detects an "almost perverse turning away from institutional responsibility." The result is "disciplinary introversion," in which academics pursue narrow research interests and seek approval from their peers, who also work within narrow fields. Then, they expect the world to beat a path to their door.

But, says Schuh, the world is beating a path to other doors, especially in the private sector, in places like the Silicon Valley, Boston, and Washington, D.C. This should shake up academics to re-evaluate their mission, especially at a time when economic retrenchments are threatening universities.

Schuh suggests six steps the land-grant university should take so it can regain its relevance and once again meet society's needs.

■ Capitalize and revitalize what we have learned about agricultural development. Agriculture, he says, is one of the few "world-class industries we still

have in this country."

■ Respond to the changed economics of education. Package educational programs for unconventional students at unconventional times.

■ Educate students for the international economy. "This nation is now a competitor in an international economy about which we know very little."

■ Seek to address society's problems, instead of letting the private sector do so. "The technological revolutions in telecommunications and computers, together with the breakup of AT&T, present society with enormous organizational questions." The university should be addressing such questions.

■ Span the gap between the frontier of knowledge and the problems of society. The purpose of research should be to solve society's problems. Specialization "is surely the road to irrelevance."

■ Change the management of academia. Academic excellence has been judged on the basis of publications written for disciplinary colleagues. Instead, challenge the notion that there is only one criterion for determining quality and excellence. Reward managers and entrepreneurial types.

Schuh cites a few examples within the university where efforts have been made to be more relevant, such as the Strategic Management Research Center (SMRC) and the Humphrey Institute. He also mentions the Center for Farm Financial Management, established by the Department of Agricultural and Applied Economics, to help farmers during the current farm crisis.

Schuh says he was inspired to write the land-grant paper as he was making the transition from the university to the World Bank. "It was a good time to take stock and see what you can say about it," he said, in a telephone interview. "Land-grant universities," he said, "are a uniquely American institution, but as a concept they're almost disappearing."

But if the interest in Schuh's paper is any indication, the land-grant concept could enjoy a renaissance. "This paper couldn't have had wider circulation than if it had been published in three journals," he said. It was originally written and presented at the bi-weekly SMRC Strategic Management Colloquium. Since then *Choices*, a new journal of agricultural economics, has picked it up and is running it as its lead article. Schuh has had requests from all over the country to present the paper, and he recently presented it for a second time at the University of Minnesota.

It is also published by the SMRC discussion paper series. There are about 50 titles in that series, and all are available by calling Susan McGuire, 624-0226. ■

Mergers from page 1

ences according to the type of merger that took place.

In the case of the previously mentioned additive acquisition, Bastien would advise the acquiring company to understand that differences do exist and to accept them.

The advice, of course, will vary, depending on the type of acquisition. In absorptive acquisitions, the acquired company will have to learn the language of the acquiring company. Therefore, Bastien might advise the acquiring company to teach the acquired employees its language, perhaps in language training programs.

During the next year Bastien will conduct further field research, to see if he can confirm his original findings. But that's just for starters. The subject is so "fantastically interesting and rich," that he's expecting it to keep him busy for at least the next 15 years. ■

Can computers capture expert thinking?

by Maureen Smith

As thinkers we humans are inefficient, forgetful, inattentive, and lazy. We're illogical, we jump to conclusions, we know things but don't know why we know them.

Yet the power of our minds is immense. Researchers are making progress in getting computer programs to mimic some of human thinking, but they keep coming up against mental power that can't be captured.

"Only a small part of thinking takes place in the conscious mind or in awareness," says Paul E. Johnson, professor of management sciences and psychology. "That's something that plagues the field to this day. What we're grappling with is the unconscious mind."

The human mind has fascinated Johnson all his academic career. After majoring in physics as an undergraduate, he decided that the problem-solving process interested him more than the physics itself, so he switched to psychology. Now he thinks of himself as a cognitive scientist. His research focuses on two fronts: studying how experts think, and turning some of what he learns into useful computer programs.

Cognitive science is an emerging field in academic circles these days, drawing on many disciplines. One of its fields of study is artificial intelligence, or what Johnson describes as "systems that can perform tasks that, if they were performed by people, we would say required intelligence."

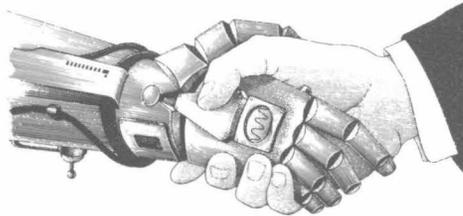
Can a machine, or more accurately a computer program, display intelligence? The answer depends on what we mean by intelligence. Creativity? No, a computer doesn't have it. The ability to learn? Not really. Having knowledge? Yes, that's where a computer can shine.

Increasingly, Johnson says, research in the field "has shifted over to the notion of expertise, an easier notion than intelligence. It's easier to say what it means to be an expert. We have systems that display expertise." Cognitive scientists like Johnson construct computer programs or groups of programs called expert systems to capture some of what

an expert knows.

It isn't easy. One characteristic of experts is that their knowledge is so deeply stored in memory that it has become automatic. "People are always saying that they can't tell us what they know," Johnson says. "They're right. They can't. The work always faces that barrier."

To get at what the experts know, Johnson and his colleagues ask them to think out loud while they work, record what they say, then analyze the process.



They have worked with experts, including university faculty members, in such diverse fields as medicine, plant pathology, management, law, and chemical engineering.

Experts, he has found, make what appear to be intuitive leaps based on incomplete data. Name just a few symptoms, and an experienced doctor is likely to make the right diagnosis. You'd never call a computer intuitive, but give it the same store of information the doctor has and it can come to the same correct conclusion.

Doctors at San Francisco's Pacific Medical Center now check their diagnoses of lung cancer against the conclusions of a computer program named PUFF, which agrees with the doctors 90 percent of the time. When they disagree, the doctors and the computers recheck.

An expert system must not only do the task and get the right answer, Johnson says, but sometimes it must get there the same way a person does. "Oftentimes people want to know how the program thinks. Otherwise they may not be willing to trust it." It's like consulting colleagues: you want to hear their reasons as much as their conclusions.

Two years ago Johnson and a group of colleagues responded to a request for proposals from the Center for Micro-

electronic and Information Sciences (MEIS), in which faculty members were encouraged to identify areas of interdisciplinary, basic research of interest to industry. Their proposal was chosen as one of the team projects, and Johnson is codirector of the project on expert systems. With significant resources from the MEIS grant, and a lot of collaboration with local businesses and industries, the work is moving forward.

Other major grants will also help fund Johnson's ongoing research on knowledge engineering and expert systems. He recently received a \$95,000 Control Data grant as well as \$70,000 from IBM. 3M supplied the research project with a \$120,000 computer workstation.

Like all cognitive science, work on expert systems is fundamentally interdisciplinary. "I've collaborated all across the university," Johnson says. "Currently I'm very interested in anthropology." Conducting research on an expert community, Johnson says, is like "going into a language community and trying to understand the native language."

Even when the language is understood, discovering what experts know and how they know it can be tantalizingly elusive. To characterize the behavior of experts, Johnson likes the analogy of a porpoise, swimming in the ocean and leaping from time to time above the water. "What you really want to understand is not the jumping but the swimming. You draw inferences from the leaps."

Developing expert systems is "enabling us to rethink one of our most precious commodities, and that is expertise," Johnson says. Usually expertise is associated with exceptional individuals. "Now for the first time we are seeing it as a commodity. We can capitalize on it and offer it as a valuable resource much more widely than in the past.

"Experts are in short supply. It takes a long time to train them." An expert system that knows much of what an expert knows can make a big difference.

Johnson cites the example of an oil

Expert to page 5

Small business start-ups can be risky business

STRATEGIC MANAGEMENT RESEARCH CENTER

When new businesses take steps to position themselves for growth, they may actually be inviting catastrophe.

Health in the early stages of development is not always a good predictor of long-term success or even survival, according to a study of new businesses in the software industry (Discussion Paper #45), conducted by researchers in the Strategic Management Research Center (SMRC). "Catastrophic" events may intervene to change a new firm's fortunes overnight.

The reasons? All firms engage in transactions with others (suppliers, customers, financiers, etc.) in the normal conduct of business. It is inevitable that a certain proportion of these transactions fail because human institutions are fallible. Small businesses represent a particularly vulnerable subset of all firms to the chance occurrence of a failed transaction because their transactions with others are highly leveraged. Hence, a small business fails when a transaction in which it is highly leveraged happens to fail.

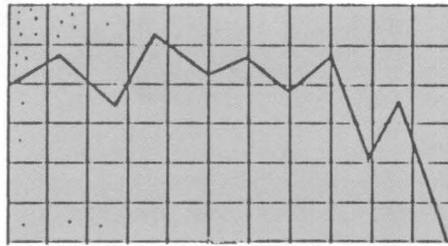
For example, to serve a customer whose business promises large revenues, a small firm may use the customer contract as collateral to secure financing in order to hire personnel and purchase other resources. Managing these activities and the work itself may mean that the entrepreneur devotes less time to seeking other business. The firm may not even be equipped to handle more business.

If something goes wrong with one transaction, the business scrambles to correct it. But when more than one transaction fails, perhaps due to factors outside the entrepreneur's control, the results can be devastating for the firm.

"These findings may seem obvious," says Jeanne Buckeye, a co-director of the study. "But most theorists and practitioners tend to blame poor planning or the entrepreneur for business failure and give no recognition to the systemic regularity of failures beyond the entrepreneur's control.

"We're saying that by its very nature, a new business is vulnerable," Buckeye adds. "Failure may be one transaction away no matter how well-planned the business, no matter how smart or hard-working the entrepreneur."

The study on business start-ups in the software industry was conducted by a team of researchers, including Buckeye, an assistant professor at the College of St. Thomas and a University graduate, Roger Hudson, a Ph.D. candidate in



strategic management, Andrew Van de Ven, 3M professor of Human Systems Management, and S. Venkataraman, a Ph.D. student in strategic management. It follows up on a 1983 study by Control Data Corporation led by Van de Ven and marketing professor, William Rudelius.

The 1983 study examined planning, organizational, and entrepreneurial characteristics, as well as environmental factors affecting the start-up of 14 businesses in the educational software industry.

At follow-up two years later, the team observed a significant reversal in fortunes for some of the firms. Several of the strongest firms in the earlier study now faced almost certain failure. The researchers believe part of the reason was that the entrepreneurs had done what they were "supposed to do" to prepare their firms for growth. They had sought and secured major contracts, hired programmers, dedicated resources to contract completion, and even leased more office space. But when one or more of these "transactions" failed, the firms simply did not have the resources to

cope.

The researchers suggest that the business that chooses to grow slowly may be more insulated from failure than one that wants to grow rapidly. But such businesses are also less attractive to most investors, contribute fewer jobs to the community, and often remain "mom and pop" operations. Furthermore, the competitive environment in some industries precludes slow growth. Thus, if growth continues to be a high priority for entrepreneurs and public policy makers, the researchers see little alternative for small firms but to engage in leveraging their business beyond their means.

"Larger, older businesses avoid what we call 'catastrophes,' or the convergence of important, failed transactions, because they have more resources," Buckeye said. "They diversify and build in redundancy. They're less dependent on a single customer, supplier, or financial source."

The research team concludes that small business success is like the situation in professional downhill skiing, in which all competitors race down the slopes out of control, conceding victory not to the best skier, but to the skier lucky enough to complete the race without mishap. This does not alleviate (indeed, it emphasizes) the necessity for each competitor to develop the most advanced competencies, technologies, organization, and leadership in order to stay in the race. It does recognize what has been largely ignored by theorists and practitioners alike—human institutions are fallible, and these are system-wide regularities in failure. ■

Bush grant helps school principals improve leadership abilities

Twenty-nine elementary and high-school educators are currently receiving improved and increased strategic management education under the auspices of the Bush Foundation and the expertise of the Strategic Management Research Center (SMRC).

The Bush Foundation awarded the SMRC a major grant to develop and direct a six-week advanced management course for public and private school principals. The Bush Principals Leadership Program responds to rising public concern about the development and improvement of local schools, according to Professor John Mauriel, program developer and director. The \$641,000,

SMRC

three-year grant provides for an extensive residential education experience for school executives, as well as for case research and course development. Program personnel selected the current 29 participants from an application pool of 65.

The Principals Leadership Program is a residential program similar to the school's Executive Development programs. It uses a variety of instructional techniques including case analyses, field work, and individual assessment, as well as planning and conducting a local school improvement program in each participant's school and a management support process designed for the participants. The program's instructional portion takes place at various conference retreat centers in Minnesota and Wisconsin. Faculty come from the School of Management, other University of Minnesota schools, other major U.S. universities, and private business.

Participants attend six program modules, which range from three to 12 days and are sequenced over 24 months. Each participant will complete a school improvement field project in their individual school, using program resources and a mini grant to help them use the leadership principles discussed in the modules.

"We're trying to help experienced principals develop or sharpen their critical leadership skills," Mauriel explained. The program should help them define school effectiveness and determine appropriate action steps to improve school results. Principals will be updated in curriculum, instructional methodology, child development, and social forces that affect the schooling process. They will also explore the impact of their professional involvement on staff, students, parents, and the community and the expectations each places on the principal.

This innovative program has drawn widespread attention, noted Mauriel. A recent program planning session at Spring Hill Conference Center was attended by faculty from the School of Management, Harvard University, the University of Chicago, and the University of Wisconsin, as well as state of Minnesota officials, Executive Development Center consultants, and a curriculum committee comprised of participants.

Mauriel, professor of strategic management and organization, has directed programs involving executive education for school superintendents for the Bush Foundation for 11 years. Other Bush grant monies fund the Bush Public School Executive Fellows Program, which enhances and sharpens the management skills of highly motivated, mid-career

"We're trying to help experienced principals develop or sharpen their critical leadership skills."

school executives. The Public School Executive Fellows Program has led to a research project currently under way as part of the Management of Innovation research studies organized and sponsored by the SMRC. This project involves the examination of "site-based management," an innovative process involving the decentralization of deci-

sion-making to school sites and the employment of site councils to manage these schools.

For more information on any of the SMRC's education management programs, contact John Mauriel at (612) 624-5485. ■

Expert from page 3

exploration firm. Many of its geologists who evaluated core samples were nearing retirement, and the company was having a hard time training others to replace them. An expert system was developed as "a resource for individuals less expert to do the same task."

Learning more about expertise also has implications for education, Johnson says. "What experts know is not the same as what we teach. People leave a professional school, go out into the world, and discover they aren't ready to practice. There is important learning that needs yet to take place. We might be able to move at least portions of that into the professional schools."

In the beginning, when Johnson asked experts to explain their expertise to him, those who agreed were curious about their own ability and maybe bemused by his efforts to understand it. Whatever they thought of the project, they didn't find it threatening.

Now the work has been successful, and in some instances "we've taken a thing that was uniquely one person's and in a sense exploited it," Johnson says. "Sometimes experts worry that they've given up their competitive advantage. There are some very important intellectual and ethical dilemmas."

Experts may well wonder, "Do I really want you to know what I know? If you know what I know, then who needs me?"

In reality, Johnson, says, experts aren't in danger of being replaced by computers. In fact, expert systems can be a helpful resource for experts themselves. "A lot of what they do is repetitive, and we can free up their time and take more advantage of their creative power."

The goal is to bring the person and the machine together to do a given task

Expert to page 7

Bingo cages aid accounting research

by Shyam Sunder

Recent visitors to the accounting department may have been surprised to find bingo cages, dice, and other questionable devices in some professors' offices. Puzzled but polite, they averted their glances to spare their teachers embarrassment. Could it be true? Do accounting professors really play with bingo cages?

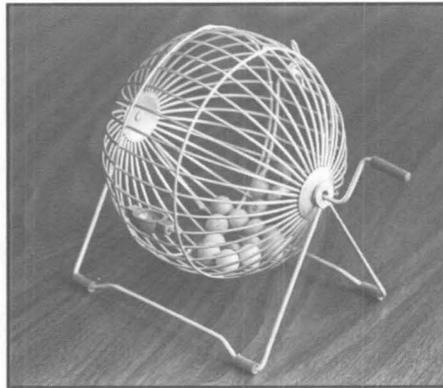
Indeed it's true—and they're involving students too! What is going on?

Accounting provides information; information is of value only in a world of uncertainty. Thus, conducting empirical research on the value of information under uncertainty requires random numbers. A bingo cage happens to be an excellent device for generating random numbers.

A random number is based on chance. It can take any one of two, three, or more values. Before the chance event occurs nobody can tell what the random number will be. If you assign one for heads and zero for tails in a coin toss, then tossing a coin yields a random number that can be either one or zero. The number of cars that pass in front of my house in the next hour is also a random number that could be as small as zero and perhaps as large as 1,000.

We are immersed in a sea of random numbers. The number of seconds it takes to brush my teeth, the number of pieces of mail I receive, the number of calories I take in at lunch, the number of students who attend my class, and the precise time I fall asleep are all random numbers. Given this generous supply of random numbers, why would anyone need special devices for generating them?

Researchers need such special devices for generating random numbers for precisely the same reason that gambling houses do. Therefore, random numbers must have known and stable characteristics. While random numbers are ubiquitous in our daily life, their properties are mostly unknown and often changing. To examine the effect of uncertainty on human and organizational behavior, researchers need ran-



dom numbers with known and stable properties for the same reason a surveyor needs a measuring tape with unchanging and known length and markings.

Coins, dice, cards, and bingo cages are some of the better known devices for generating random numbers. Most statistics books also carry tables of certain types of random numbers. Finally, there are some computer programs that generate various kinds of numbers. Since a computer is much more convenient and flexible than a bingo cage, why should anyone bother with the latter?

When conducting experiments that involve gaming among human players, coin tosses, dice, cards, bingo cages, and other such *physical* devices are still superior to computers for two subtle but important reasons. The first of these reasons has to do with the nature of random numbers and the second concerns the role of information in the games people play. A random number depends on a chance event. Whether something is or is not a chance event for a person depends on how much that person knows. What I find under the Christmas tree may be a chance event to me until I open my present, but it is not for my daughter who spent hours shopping for it. A number in the random number table is random only until one reads it; and then, relative to the knowledge of the reader, that number ceases to be random.

Computers, in spite of all their sophistication, generate random numbers through a well-specified series of oper-

ations. The result is a fixed, cyclical—albeit long—sequence of numbers. For those unfamiliar with the workings of computers, the numbers a computer produces are, both in fact and appearance, random numbers. However, for someone who knows the system, there is nothing random about the sequence generated by a computer: each number follows and is followed by others in a known order. Computer scientists have appropriately dubbed such numbers "pseudo-random" numbers.

Random numbers generated from physical devices are fundamentally different from those generated by computers. Nobody knows which ball in a bingo cage has more or less chance than others of being drawn. While it is conceivable that one may be able to use the laws of motion to predict which ball might be drawn next, nobody has apparently succeeded in making reliable predictions of this type. Until someone acquires such ability, the bingo cage remains a generator of "true" random variables. It is the acquisition of such an ability in the card game of Black Jack by the so-called "counters" that led some casinos to change the rules of that game.

The pseudo-random nature of computer-generated numbers is, however, only part of the reason why researchers in accounting and some other disciplines tend not to employ them in experimental work with human subjects. The rest of the explanation lies in the subtle interplay of information in games among human beings.

Human behavior in which the action of each person affects the welfare of the others is characterized as a game. In a game, the action strategy of a person depends not only on what she knows but also on what she knows about what others know, and on what she knows about what others know about what she knows and so on. The technical concept of "common knowledge" in game theory refers to that which (1) everyone knows, and (2) everyone knows that everyone knows, and (3) everyone knows that everyone knows that everyone knows, and (4) everyone... *ad infinitum*.

In conducting controlled experi-

ments on human behavior in game settings, it is important that the experiment is conducted in such a manner that the information that is supposed to be common knowledge is indeed common knowledge. For example, suppose I distribute slips of paper, each marked with an X, to everyone in a room. Everyone in the room knows X but everyone does not know that everyone knows X. Therefore X is not common knowledge in the technical sense we defined above, even though each individual in the room knows it. One way of making X common knowledge would be to write it on the chalkboard.

Whether something is or is not common knowledge is not a mere academic quibble. It turns out that people behave radically differently when the same information is privately known to all individuals and when it is common knowledge. This is the very essence of the old story about the boy who cried that the emperor had no clothes.

ACCOUNTING RESEARCH CENTER

In conducting laboratory experiments with human subjects and random numbers, it is often insufficient for the researcher to use numbers that are in fact random to the researcher. The researcher must also convince the human subjects so they *believe* the numbers are random. In other words, it becomes important for the randomness of the numbers to be common knowledge between the experimenter and the subject. This is where the computer-generated random numbers fail to measure up.

In order to make the randomness of the numbers given to the subjects common knowledge, it is necessary that both the subjects and the researcher understand the procedures used to generate the numbers. When the pseudo-random nature of the computer-generated numbers is explained, it may occur to the subjects that the numbers, which are random to them, may not be random to the researcher at all. If the subjects are not familiar with the workings of the computer, how could the researcher convince them that the numbers appearing on the monitor were not fixed by the researcher? Frankly, if the sub-

jects happen to be familiar with the workings of computers, it may be even more difficult to convince them of the randomness of numbers presented.

The beauty of the bingo cage and other such physical devices is that their workings can be easily understood and verified by the subjects. It is actually possible to make the nature of the numbers generated by such devices common knowledge. It is almost impossible to achieve this with computers. High technology is beat by its own sophistication.

Okay, so researchers use bingo cages to generate random numbers that are not only "pure" but whose "purity" is common knowledge. What kind of accounting research needs these random numbers?

Accounting is widely thought to be a key link between firms and the markets in which their securities are traded. Many of the statutory requirements of accounting disclosure under the Securi-

ties Act of 1933 and the Securities and Exchange Act of 1934 are based on assumptions about how such disclosure affects the behavior of markets and the distribution of wealth among traders. The insider trading charges filed by the Securities and Exchange Commission against Mr. Dennis Levine in May 1986 have spurred fresh debate on the possible consequences of insider trading. The effect of such activities on Levine's wealth appears clear enough; their effect on the overall efficiency of the stock market is less clear.

Gathering empirical data on such insider trading is difficult, if not impossible, because of the legal implications of such activity. Recent years have seen the development of theories of insider trading that remain largely untested due to this problem. Conducting laboratory tests with human subjects who trade in a miniature market with real money and information is one possible way of researching questions about insider trading. This is one of the purposes for which accounting faculty use bingo cage-generated random numbers.

The idea of common knowledge itself also plays a direct and important role in

corporate financial reporting and financial markets. The public disclosure laws for publicly held firms require not mere disclosure but *public* disclosure. For certain functions of financial reporting and security markets it is not enough that everyone knows that information, but that everyone knows that everyone knows the information. If this latter condition is not satisfied, it may lead to bluffing and a waste of society's resources. We can seek an understanding of the public disclosure laws in terms of the properties of common knowledge of information. ■

Shyam Sunder is the Honeywell Professor of Accounting at the University of Minnesota School of Management.

Expert from page 5

more successfully than either could do it alone, he says. With help from a computer, an expert can achieve a level of proficiency that wouldn't have been possible before.

In any case, not all of expertise can be understood by scientists or translated into a computer program. "There's a lot of left over," Johnson says. "The kinds of expertise that lend themselves to [computer] modeling are those that do not rely on a lot of visual or other perceptual processing or on qualitative judgments."

Cognitive scientists can program a computer to make the kind of leap that comes from having a strong knowledge base. "But if you're talking about the creative leap, the one you've never taken before, that we have a lot of trouble with."

Just as experts don't need to worry about being replaced by computers, neither do the rest of us. Interestingly, Johnson says, the hardest problem for cognitive scientists is trying to teach a computer common sense.

"Give me an expert any day," he says. "I'm much more likely to be successful in capturing the thinking of an expert than some aspect of our daily life. That's a humbling observation. Something like common sense is beyond our reach."

This article originally appeared in the March 1986 edition of UPDATE, a publication for University of Minnesota faculty and staff published by University Relations. ■

SMRC releases new papers, cases

The Strategic Management Research Center has released the following discussion papers, cases in strategic management, and advanced management practices papers since January 1986. To order these papers or to receive a complete list of paper titles, call Susan McGuire at 624-0226.

DISCUSSION PAPER SERIES

(45) Jeanne Buckeye, Roger Hudson, Andrew Van de Ven, and S. Venkataraman, "New business startups, part II: A process model of small business failure" (January 1986).

(46) David Bastien and Andrew H. Van de Ven, "Managerial and organizational dynamics of mergers and acquisitions" (February 1986).

(47) Roger Schroeder, Gary Scudder, and Dawn Elm, "Innovation in manufacturing" (February 1986).

(48) Roger Schroeder, Andrew H. Van de Ven, Gary Scudder, and Douglas Polley, "Observations leading to a process model of innovation" (February 1986).

(49) David T. Bastien, "Common patterns of behavior and communication in mergers and acquisitions" (February 1986).

(50) Alfred Marcus and Robert S. Goodman, "Compliance and performance: Toward a contingency theory" (March 1986).

(51) Andrew H. Van de Ven and associates, "Progress report on the Minnesota Innovation Research Program" (March 1986).

(52) Mahmood A. Zaidi, "Do incomes policies restrain wage inflation? Some evidence from Aus-

tralia, Canada, and the U.S." (March 1986).

(53) Peter Smith Ring, "Strategic issues: What are they and from where do they come?" (March 1986).

(54) Philip Bromiley, "On the prospects for cooperation between strategy and finances" (March 1986).

(55) Stefanie Ann Lenway and Beverly Crawford, "When business becomes politics: Risk and uncertainty in East-West trade" (May 1986).

(56) Mary Knudson, "The research and development on a biological innovation: The case of hybrid wheat" (May 1986).

CASES IN STRATEGIC MANAGEMENT SERIES

(1) John M. Bryson, Paula J. King, William D. Roering, and Andrew H. Van de Ven, "Strategic management at the Amherst H. Wilder Foundation" (March 1986).

ADVANCED MANAGEMENT PRACTICES PAPER SERIES

(1) Roger C. Schroeder, Gary D. Scudder, Michael J. Pesch, "Approaches to managing the cost of materials" (March 1986). ■

Ruttan wins award

Professor Vernon Ruttan, SMRC associate and professor of agricultural and applied economics at the University of Minnesota, recently received the Distinguished Service Award, the highest honor given by the U.S. Department of Agriculture.

Ruttan received his award based on his out-

standing contributions and sustained intellectual leadership in American agriculture, the university, the scientific profession, and international agricultural research programs. Ruttan's research has focused on agricultural economic development and technical change. His theory on induced technical innovation (SMRC Discussion Paper #26) has been gaining international recognition.

In June 1986, Ruttan received two additional awards. He was elected a fellow of the American Association for the Advancement of Science and appointed a Regents' Professor at the University of Minnesota. ■

IR receives grants for endowed chair

The School of Management's Industrial Relations Center (IRC) received two gifts of \$50,000 each for its endowed land-grant chair in industrial relations.

The Geo. A. Hormel & Company, Austin, Minn., recently made a \$50,000 pledge to the endowment fund, and a \$50,000 contribution to the fund was also committed by the Signal/UOP Foundation (Allied-Signal, Inc.), Des Plaines, Ill.

The goal for the IRC Chair endowment fund is \$1.5 million. In addition to the Hormel and Signal/UOP Foundation gifts, \$150,000 has been pledged by the Honeywell Foundation, and the University of Minnesota, through the Permanent University Fund, will contribute \$750,000 to match private gifts to the fund.

A national campaign is

currently under way to solicit endowment support from corporations, foundations, alumni, and friends.

The IRC, a school division, is the unit through which the university's labor relations/human resource teaching, research, and outreach activities are offered. The IRC also responds to labor and management education needs through a wide array of programs and operates the Labor Education Service and Employer Education Service, which offer professional development programs.

The establishment of the endowed land-grant chair in industrial relations will provide competitive funding to attract an established senior research scholar who, in turn, will help attract other outstanding faculty colleagues, high calibre graduate students, and federal and private research dollars. ■

SMRC cosponsors conference

The Strategic Management Research Center is co-sponsoring the 1986 Minnesota Linguistics Conference, September 12 and 13, at the University of Minnesota. The theme of the conference is "Linguistic Accommodation and Style-shifting." The causes and effects of linguistics accommodation will be addressed in a variety of ways: theory and case studies, style in synchronic and diachronic linguistics, style in second-language acquisition, code-switching, and applications of various theories of style.

For more information on the conference, call professor Elaine Tarone of the linguistics department at 624-3528. ■

Dick Cardozo, professor of marketing and business law, received a single-quarter leave and a Dean's Innovation Fund award to study product line strategies and their relationship to business performance.

Gary Carter, assistant professor of accounting: "The Commissioner's Non-acquiescence—A Case for a National Court of Tax Appeals," *Temple Law Quarterly*, September 1986.

Dennis Daly, undergraduate coordinator of accounting, received the Green Eyeshade Award for Accounting Teacher of the Year, 1985-86, by the Student Accounting Association.

Gene Daniels, director of private sector programs for the labor education service, *Industrial Relations Center: Labor Guide to Local Union Leadership* (with Larry Casey, Tony DeAngelis, and Roberta Till-Retz), Prentice-Hall, April 1986. Daniels and DeAngelis, coordinator of private sector programs, taught situational leadership to union officers in Philadelphia and Pittsburgh in May. In July they taught the program at Michigan State University's Union Leadership Program.

Gordon B. Davis, Honeywell Professor of Management Information Systems, presented "Action Research in Management Information Systems" at Oakland University, Mich. As Charles G. Thalheimer Family Scholar-in-Residence, he spoke on "The Importance of Computers to the Business School Curriculum" and "Striving for Excellence in the Management of Tomorrow's Information Systems Technologies" at the Virginia Commonwealth University.

John Dickhaut, professor of accounting: "Controlling Preferences for Lotteries on Units of Experimental Exchange" (with Lane Daley, Joyce Berg, and John O'Brien), *The Quarterly Journal of Economics*, May 1986.

David Dittman, professor and chair of accounting: "Optimal Type and Timing of Account Audits in Internal Control" (with Richard C. Morey), *Management Sciences*, Vol. 32, No. 3, March 1986. "Contracting Strategies for Maximum Benefit in Sales Contracts with Govern-

ments: The Installment Sales Alternative" (with Raymond J. Krasniewski and Margaret Smith), *Research in Governmental and Non-Profit Accounting*, JAI Press, accepted for publication. He presented "Association Between Hospital Efficiency Measures and Third-Party Reimbursement: A Test of the Cost Pass-Through Hypothesis" at the University of Kansas, Lawrence, and in the Health Services Research Seminar series at the University of Minnesota.

Alan Dubinsky, visiting associate professor in marketing and business law: "Antecedents of Retail Salesperson Performance: A Path-Analytic Perspective," *Journal of Business Research*, June 1986. "Turnover Intentions of Low and High Performing Sales Personnel," *Journal of Sales Management*, No. 3, 1985.

Richard A. Edwards, Frederick R. Kappel professor of business-government relations and member of the department of strategic management and organization, presented "The Future of Federal v. State Regulation" to a Society of Actuaries meeting in Kansas City, Mo. In July he was panel moderator for "Corporate Government Relations as a Career Path" at the National Association of Manufacturers meeting in Chicago.

Gordon C. Everest, associate professor of management sciences: *Database Management: Objectives, System Functions, and Administration*, McGraw-Hill, 1986. Everest's *Review and Evaluation of DM*, *Review and Evaluation of DMRS*, and *Review and Evaluation of Application* were published by GEMS Education and Management Sciences.

John Fossum, associate professor and director of graduate studies for industrial relations: "American Hospital Supply Corporation" (with D. F. Parker, J. H. Blakslee, and A. J. Rucci), in L. D. Dyer (ed.) *Human Resource Planning: Tested Practices in Five Major U. S. and Canadian Companies*, Random House, 1986. "Modeling the Skills Obsolescence Process: A Psychological/Economic Integration" (with R. D. Arvey, C. N. Paradise, and N. E. Robbins), *Academy of Management Review*, 1986. *Personnel/Human Resource Management* (3rd ed.) (with H. G. Heneman, III, D. P. Schwab, and L. D. Dyer), Irwin, 1986.

Tom Hoffmann, professor of management sciences, chaired the American Production and Inventory Control Society's Master Planning Committee meeting in Los Angeles.

John Lehman, assistant professor of management sciences: "Program Design and Rhetoric," *IEEE Software*, May 1986. Lehman presented "User Satisfaction with Business Graphics in an Integrated Hardware Environment" at the National Computer Graphics Association Ninth Annual Conference in Anaheim, Calif.

Rebecca A. Luzadis, assistant professor of industrial relations, presented "Explaining Patterns in Old-Age Pensions" at the National Bureau of Economic Research Labor Studies meeting and at the Eastern Economics Association annual meeting.

Charles Manz, assistant professor of strategic management and organization: "Beyond Imitation: Complex Behavioral and Affective Linkages Resulting from Exposure to Leadership Training Models" (with H. Sims), *Journal of Applied Psychology*, in press. "An Integrated Perspective of Self-Control in Organizations" (with K. Mossholder and F. Luthans), *Administration and Society*, in press. "Dwight D. Eisenhower: A Case Study of a Superleader" (with H. Sims and J. Everett) was accepted for presentation at the August National Academy of Management meeting in Chicago.

Raymond A. Noe, assistant professor of industrial relations: "Personnel Selection and Equal Employment Opportunity" (with N. Schmitt), in C. L. Cooper and I. Robertson (eds.) *Review of Industrial and Organizational Psychology*, Vol. 1, John Wiley & Sons, in press. "Using the Lens Model to Magnify Raters' Consistency, Matching, and Shared Bias" (with N. Schmitt and R. Gottschalk), *Academy of Management Journal*, in press.

Rudy Pinola, director of IRC policy studies and development services: *Modern Microeconomic Theory* (with William Sher), North-Holland, Elsevier Publishing.

Judy Rayburn, assistant professor of accounting, presented "The Association of Operating Cash Flows and Accruals with Security Returns" to the 1986 *Journal of Accounting Research* Conference at the University of Chicago.

Faculty to page 14

Peter Ring, associate professor of strategic management and organization, delivered "Strategic Issues: What Are They and Where Do They Come From?" at the American Planners Association annual meeting in Los Angeles. Ring delivered a version of this paper to the Naval Postgraduate School in Monterey, Calif.

William Rudelius, professor of marketing and business law: *Marketing* (with Eric Berkowitz and Roger Kerin), Times Mirror/Mosby.

Bob Ruekert, assistant professor of marketing and business law, and Orville Walker, professor of marketing and business law: "Interactions Between Marketing and R&D Departments in Implementing Business Strategies," *Strategic Management Journal*, accepted for publication. "Marketing's Interaction with Other Functional Units: A Conceptual Framework and Empirical Evidence," *Journal of Marketing*, accepted for publication. Ruekert delivered "Building an Effective Marketing Team: The Importance of Implementation to Marketing Strategy" at a Northern States Power Company-sponsored First Annual Electric Marketing Conference. Ruekert and **Ed Freeman**, associate professor of strategic management and organization, were among 39 faculty honored at the Second Annual Faculty Appreciation Reception sponsored by the University Student Alumni Association. The association recognized contributions made to student organizations and improvements of the student experience at the university.

Roger Schroeder, professor of management sciences: "The Content of Manufacturing Strategy: An Empirical Study" (with John C. Anderson and Gary Cleveland), *Journal of Operations Management*, accepted for publication. Schroeder delivered a lecture on operations strategy to the Harvard Business School Operations Management Seminar in April. He will teach operations strategy at INSEAD in Fontainebleau, France, in July.

Jim Scoville, professor of industrial relations: *Pay Linkages and the Economy* (with Dennis A. Ahlburg and John J. Lawler), University of South Carolina Press, 1987.

Brian Steffy, assistant professor of industrial relations: "A Critical Theory of Organization Science" (with A. Grimes), *Academy of Management Review*, in press. "Dual Career Planning-Support, Effectiveness of Problem-Solving in the Marriage, Interrole Conflict, Marital Satisfaction, and Job Stress: A Study of Married Female Professionals" (with D. Ashbaugh), *Journal of Business and Psychology*, in press.

Shyam Sunder, professor of accounting: "Stock Price and Risk Related to Accounting Changes in Inventory Valuation," *The Modern Theory of Financial Reporting*, Lawrence Brown (ed.), Business Publications, Inc., 1986. "Incentives, Learning, and Processing of Information in a Market Environment: An Examination of the Base Rate Fallacy" (with Rong Ruey Duh), *Laboratory Market Research*, Shane Moriarty (ed.), 1986.

Terry Tranter, adjunct assistant professor of accounting: "Pricing Hospital Loss Leaders," *Hospital Cost Accounting Advisor*, accepted for publication.

Mark Treleven, assistant professor of management sciences: "The Timing of Labor Transfers in Dual Resource Constrained Systems: Push vs. Pull Rules," *Decision Sciences*, accepted for publication. "The Sources, Measurements, and Managerial Implications of Process Commonality," *Journal of Operations Management*, accepted for publication.

James C. Wetherbe, professor of management sciences and director of Management Information Systems Research Center: "An Empirical Study of Occupational Stress, Attitudes, and Health Among Information Systems Personnel" (with J. M. Ivancevich and H. A. Napier), *Information & Management*, Vol. 9, No. 2, September 1985. "Approaches to End-User Computing: Service May Spell Success" (with R. Leitheiser), *Journal of Information Systems Management*, Winter 1986.

Andrew F. Whitman, professor of finance and insurance, coordinated the June seminar, "Minnesota Insurance Law: Managing Liability Insurance Costs." He served as director and faculty

member for "Dealing with the Liability Insurance Crisis" in March and completed his seminar series, "Managing Finances to Fit Your Life-Style," in April. Whitman drafted a liability reinsurance bill, which passed the Oklahoma State Senate.

C. Arthur Williams, Jr., professor of finance and insurance: "Higher Interest Rates, Longer Lifetimes, and the Demand for Life Annuities," *The Journal of Risk and Insurance*, March 1986. *Insurance and Risk Management*, 2nd edition, Building Owners and Managers Institute International, 1986.

Mahmood A. Zaidi, professor of industrial relations and director of international program development: "On the Economics of Non-Profit Sellers: Output Policies in Some U.S. Community Hospitals" (with Richard L. Ernst), *The Review of Industrial Organization*, Vol. 11, No. 4, 1986.

Visiting Faculty

Danielle Boulanger, from Lyon University, is the exchange visitor with the University of Minnesota/Lyon University Exchange Program. Boulanger works with **Sal March**, associate professor of management sciences, on database management systems.

Louis Boulanger, from Lyon University, is a visiting honorary fellow in management information systems through spring 1986.

Hiroshi Ohta, from the University of Osaka Prefecture, Japan, is visiting the decision sciences area of the management sciences department.

K. S. Raman, from the National University of Singapore, is a visiting honorary fellow in management information systems through summer 1986.

Boyd C. Randall, from Brigham Young University, is the Master of Business Taxation Program's distinguished visiting professor in taxation.

For reprint information call (612) 625-0162 or write Laurel Hamilton, Office of the Dean, 271-19th Ave. S., Minneapolis, MN 55455. Copies of *Risk Management and Insurance* issues can be obtained from Professor C. Arthur Williams, Jr., Department of Finance and Insurance, 271-19th Ave. S., Minneapolis, MN 55455. □



EMAIR from page 6

Student Recruitment

The IRC directed its initial student recruiting efforts toward the backlog of 150 persons who previously expressed an interest in enrolling in an evening program. This was followed with announcements to the Twin Cities personnel and labor communities and advertisements in major Twin Cities newspapers. By April 1985 the IRC had selected an inaugural class of 35 students. The qualifications of this class were essentially similar to those of students in the day program with the exception that most had several years of work experience, Fossum said. Average undergraduate Grade Point Average (GPA) was 3.28. Mean GRE-Verbal and Quantitative scores were 539 and 578, respectively—essentially identical to day program entrants.

Early recruiting efforts indicated an opportunity to accelerate program growth, Fossum said. Initially the IRC planned that the program would grow to 90 by the third year, with admissions of 30 each of the first three fall terms. In the middle of fall 1985, the IRC decided to add a class in spring 1986, and then admit two more classes in 1986-87 to bring the program size up to about 120 and to enable earlier offerings of elective courses on a more economically viable basis. Fifty-two students were enrolled in the EMAIR program as of spring 1986.

Student Backgrounds and Enrollments

While many students are in their late 20s and are currently in personnel management and labor relations assignments, a wide diversity in backgrounds exists. A few students have just completed undergraduate degrees and are not otherwise able to enroll in a full-time day program. Some other students who are employed full time are anticipating a career change. Ages range from the early 20s to the late 40s. Several have graduate degrees in other areas. Several are university employees taking the opportunity offered through Regents' Scholarships to enroll in the program. The male-female mix is currently about 40:60.

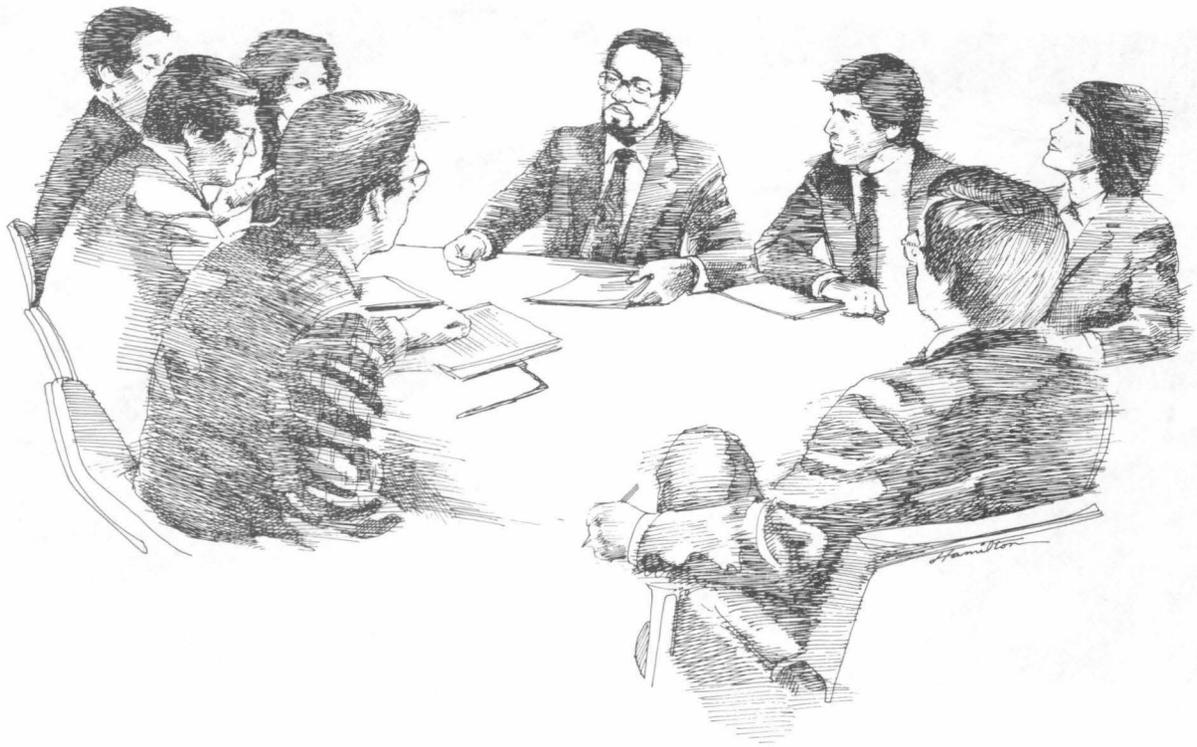
Most of the courses are offered one night per week. About one-half of the students take two courses per term with the other one-half taking one. Rumors suggest that at least two students are in a contest to see who can finish first—an accomplishment that is theoretically possible at the end of summer 1987, Fossum noted. These first evening alumni will join the more than 1,200 others who have enrolled in the day MAIR program since its inception in 1953 and who are leaders in implementing state-of-the-art practice in their industrial relations careers.

EMAIR Integration

The IRC jointly orients the fall and spring EMAIR entrants and the corresponding entering day program entrants at the beginnings of their programs. They introduce the graduate faculty; explain IRC's mission and its components; cover center, school, and university facilities; and explain the program and the role of advisors and the director of graduate studies. Iota Rho Chi student officers explain opportunities for student involvement, and representatives from local professional organizations such as the Twin Cities Personnel Association and the Human Resource Systems Professionals describe the activities in which their organizations involve MAIR students.

The IR graduate faculty instructs in both the day and evening versions. When the program was established, the faculty made clear its intention that the only difference between the requirements and instruction in the day and evening programs would be the time schedule, Fossum said. Faculty commitment to the program is strong and interest in the community is running high, he added.

Persons interested in more information on the program should write to John Fossum, Director of Graduate Studies, Industrial Relations Center, University of Minnesota, 271 19th Avenue South, Minneapolis 55455; or call (612) 624-0092. □



Corporate fund-raising:

SOMA goals: support and interaction

Last November the school launched its new School of Management Associates (SOMA) program with a pitch for support to companies represented on the Board of Overseers. The concept is straightforward—to provide a broad base of corporate unrestricted giving to support new initiatives and important activities not otherwise funded; to maximize school access and service to those associate companies; and to stimulate corporate awareness of and involvement in school-wide priorities.

Dean Preston Townley is candid about the program's objectives: "an umbrella program for unrestricted corporate giving is in no way a unique idea; every major business school has such a program. What we hope to achieve here, however, is a broader, interactive relationship." Associate Dean for External Affairs Anne Benisch adds, "we are asking for more than money."

In addition to making a financial commitment scaled from \$2,500-\$10,000 depending on the annual revenues of the company, each associate company is asked to name a corporate executive to act as liaison to the school. "We want the supporting companies to tap us and push us as well as our tapping them!" Benisch says. Acceptance of this idea has been very good. Seventeen companies have signed on—a strong endorsement of the concept and an infusion of support to fund such things as student fellowships and scholarships, international programs, expansion of placement and counseling activity, and faculty development.

The school is accelerating program efforts this summer. Benisch said she would like to see the associates roster grow to a real "who's who of our corporate community over the next year." In addition to measurable improvements in corporate interaction, "we plan to give recognition to associates at every opportunity," she says. "Their investment—in human and financial resources—is the leavening we need to continue the School of Management's drive to the top."

Recently Julie Erickson Heupel (BSB '81, MBA '86) joined the school's External Affairs staff as director of corporate relations. A major portion of Heupel's job will be marketing the SOMA program, "selling" the school to its corporate constituency.

Julie joined the school from Norwest Corporation, where she has held positions as a market/product analyst, a marketing consultant, and most recently, Manager Sales Management/Marketing Information Systems. "Her knowledge of our program, her corporate experience, and her interpersonal skill make her a most valuable member of the external affairs staff," Benisch says. □



*Julie Erickson
Heupel*

Alumni News

1920s

Phillip J. Blien, '24, died March 17. He lived in Venice, Fla.

Raymond E. Bartholdi, '25, is retired from the dictaphone business he owned for 50 years. He is one of the oldest living relatives of Frederic Auguste Bartholdi, the French sculptor who designed the Statue of Liberty. Raymond Bartholdi and his daughter, Barbara Crockett, flew to view the monument courtesy of The Kellogg Co., a corporate sponsor of the statue's restoration. They attended the gala marking the completion of repairs and the statue's 100th birthday on July 4.

1940s

J. Stanley Harris, '47, retired as Houston county treasurer after 13 years of service. He died of a heart attack on August 13, 1985.

Kenneth R. Wahlberg, '49, retired as senior vice president and director of IDS Financial Services, Inc., and as president and chairman of IDS Certificate Company, Minneapolis.

1950s

Donald E. Becker, '50, owns and operates Hedman Plumbing & Heating Co., St. Paul, Minn. He enjoys European travel and has made eight trips so far; his future plans include trips to Scandinavia and Northern Europe.

Orvin J. Hall, '50, is retired from real estate and sales, Towle Real Estate Co., Minneapolis. He spends winters in Harlingen, Texas, and summers in Alexandria, Minn.

1960s

Johan Arndt, '63, died March 11 in Oslo, Norway. He was a professor of marketing at the Institute of Business Administration, Oslo, and adjunct professor of business administration at the Norwegian School of Economics and Business Administration, Bergen, Norway. Arndt is survived by his wife, Monica, and two children.

Robert D. Schwartz, '67, recently opened his own law practice in Renaissance Square, Minneapolis. He holds a Certified Commercial Investment Member (CCIM) designation, awarded by the Realtors National Marketing Institute.

Paul E. Thorson, '68MBA, is a senior production engineer for Honeywell, Inc., Golden Valley, Minn.

Robert J. Brown, '69, is director of resources administration, Department of Health and Human Services, U.S. Government, Chicago. He has been employed there for 15 years. Brown is married and has three children.

1970s

Rudolph F. Lauer mann, '71MBA, is director, acquisitions and business development for 3M, St. Paul.

Stuart J. Bonniwell, '75, is sole practitioner in the Stuart J. Bonniwell-CPA firm, Edina, Minn.

Barry V. Hartzell, '75, is production manager of Paragon Industries, Kent, Wash.

James L. Miller, '75MBA, is product manager for Jostens, Chicago. He lives in Naperville, Ill.

Leland (Lee) W. Hansen, '76, is a system specialist manager for Motorola Communications & Electronics, Inc., Wauwatosa, Wis. He supervises specialist staffs in six states for the government markets division.

Todd H. Johnson, '76, joined the law firm of Gislason, Dosland, Hunter & Malecki, Minnetonka, Minn., as an associate in March.

Yi Tak Chiu, '78, is credit manager for the S.E.A. region of National Semiconductor Hong Kong LTD., Hong Kong.

Edith F. Godfrey, '78MBA, is assistant treasurer for Hutchinson Technology Inc., Hutchinson, Minn. She is president of the Soroptimist Int'l of Greater Minneapolis, a service club for women, and a past volunteer for the Greater Minneapolis Girl Scout Council.

Melvin W. Graf, '78, is president of Travel Network, Inc., Minneapolis.

Michael D. Heine, '78MBA, is assistant vice president of systems for First Chicago Leasing Corporation, Chicago. His daughter, Leanne Elise, was born in August 1985.

W. Brent Wight, '78MBA, is a partner at Coopers & Lybrand, Minneapolis.

James Cross, '79MBA, is assistant professor of marketing at Arizona State University, Tempe, Ariz. He lives in Phoenix.

William E. Edgley, '79MBA, is a personnel manager for Kaiser Aluminum & Chemical Corporation, Spokane, Wash.

Thomas R. Kluver, '79, is a finishes division sales representative for E.I. DuPont Company, Minneapolis. Because of the assignment of new territory in Wisconsin, Kluver, his wife Dixie, and son Michael relocated to Eau Claire, Wis., in the past year.

Sandra Luk-ho Leung, '79, is assistant manager for PK Christiania (HK) Ltd., Hong Kong.

Roger B. Winship, '79MBA, is vice president of The Chicago Corporation, Chicago.

1980s

Robert S. Hovelson, '80, left Dyco Petroleum in 1985 to join The St. Paul Companies, Inc., St. Paul, Minn., as a financial accountant. Hovelson lives in St. Louis Park, Minn.

Shu-Yu Lin, '80MBA, is audit manager for Peat, Marwick, Mitchell and Co., Taipei, Taiwan, Republic of China.

Michael J. McGroarty, '80MBA, is an assistant vice president in corporate lending for First Bank St. Paul, St. Paul, Minn. He lives in Falcon Heights, Minn.

Daniel S. Rivkin, '80MAIR, is a salon director for Regis Corporation, Minneapolis.

Debbie Lebens Sjolander, '80MBA, is manager of scientific applications software, at Sperry, St. Paul, Minn.

Paul Way, '80, is a commercial lender for Norwest Bank Midland, Minneapolis. Way is president of the Twin City Alumni Chapter of Delta Sigma Pi. He and wife Michele were married in October 1983.

Alumni to page 18

Barbara Weston, '80MBA, is region planning/analysis manager with Xerox Corporation, Des Plaines, Ill. She lives in Chicago.

Fereshteh Azad, '81MBA, is manager of life proposal systems, IDS American Express, Minneapolis.

Duane D. Begin, '81, is a systems analyst with Super Valu, Inc., Minneapolis.

Julie C. Bredahl, '81, is manager state assessments for Burlington Northern, Fort Worth, Texas. She attends Southern Methodist University in Dallas and expects to receive her MBA in 1987.

Jay P. Carstenbrock, '81MBA, is manager of national accounts and supply operations, The Standard Oil Company, in Cleveland, Ohio. He lives in Fairview Park, Ohio.

Debra Finck Englund, '81MAIR, is compensation and HRIS manager for American Med Centers, Minneapolis.

Roger Hall, '81MBA, is marketing services manager with Renal Systems, Minneapolis. He lives in New Brighton, Minn.

Olin M. Hoover, '81MBA, is marketing research manager for General Mills, Inc., Minneapolis.

Andrea L. Kelly, '81MBA, is senior external reports accountant with IDS Life Insurance Company, Minneapolis. She lives in Robbinsdale, Minn.

Mary McGrory-Usset, '81MBA, is a marketing supervisor with 3M's BSECP division, St. Paul, Minn. She had a son in December 1985.

Nancy L. Nienaber, '81MBA, is senior marketing analyst with 3M, St. Paul., Minn.

Richard J. Strelow, '81MBA, is a financial analyst for ITT Consumer Financial Corporation, Minneapolis.

Freeman C. Tsui, '82MBA, is a health care consultant and statistician with Heath Economics, Ltd., Springhouse, Pa. He lives in Glenside, Pa.

A. Babette Apland, '82MBA, is vice president of Mount Sinai Hospital, Minneapolis. She lives in St. Paul, Minn.

Wayne A. Arnold, '82MBA, is a quality administrator for Honeywell, Inc., Minnetonka, Minn.

A. Kristian Bak, '82MBA, is an internal auditor for the Scandinavia area of Dansk ESSO, a member of The Exxon Group, Copenhagen, Denmark.

Michael N. Braverman, '82MBA, is a programmer/analyst for Hewlett-Packard Company, Cupertino, Calif.

Steven J. Helgen, '82MBA, is assistant vice president with First Bank System, Minneapolis.

Stephen R. Henderson, '82MBA, is a principal analyst at Cytrol, Inc., Edina, Minn.

Glen E. Parchmann, '82MBA, joined Data Base Management, Inc., Manchester, Conn., as a marketing representative for data processing consulting services. He lives in Rocky Hill, Conn.

John J. Rockwell, '82MBA, is a senior financial analyst at 3M, St. Paul, Minn.

Thomas E. Rogstad, '82MBA, is president of TR Squared Consulting, Inc., Minneapolis. He has two sons, John Thomas and Eric Stephen.

Ronna Cress Roisum, '82MBA, is a bank officer with Idaho First National Bank, Boise, Idaho.

Mark D. Stanga, '82, is a financial analyst with the computer systems division of Sperry, Eagan, Minn.

Vivian M. Trembley, '82MBA, is a corporate financial analyst for Northwest Airlines, Inc., St. Paul, Minn. Trembley and Margaret Murray, '82MBA, plan a two-week vacation in Australia.

Cindy Wolden-Hedlund, '82, was promoted to sales manager of AMCO Medical Service, Dallas, Texas.

Cynthia K. Besonen, '83MAIR, is a senior human resources representative with the military avionics division of Honeywell, Inc., Minneapolis. She lives in Hopkins, Minn.

Mark H. Boeyink, '83MBA, accepted a position as assistant vice president for Western Bank & Insurance Agency, St. Paul, Minn. He is responsible for marketing and planning.

Neena R. Buck, '83MBA, is a senior associate engineer for the advanced technology program, IBM, Rochester, Minn. She identifies and evaluates advanced technologies, specifically artificial intelligence and natural language, that potentially affect IBM systems.

Paul A. Erickson, '83MBA, is a market analyst with MCI Communications, Washington, D.C. He lives in Herndon, Va.

Emily Galusha, '83MBA, is manager of new business ventures, American Med-Centers, Minneapolis.

Susan A. Hiestand, '83MBA, is a market development supervisor for 3M, St. Paul, Minn.

Jongsoo Kim, '83MBA, works for Honeywell, Inc., Plymouth, Minn. Her son, Brian, was born in February.

Dean P. Larsen, '83MBA, is in pilot training with the U.S. Air Force in Columbus, Mo.

Patrice Peters, '83MBA, is a financial analyst-treasury with Republic Airlines, Bloomington, Minn.

Scott F. Peterson, '83MBA, is a compensation analyst for Philip Morris USA, Richmond, Va.

Kamala V. Puram, '83MBA, is a senior programmer analyst for CENEX, St. Paul, Minn. Puram's second son, Rishi, was born in February.

Ronn Seim, '83MBA, is a senior financial analyst with Pillsbury, Minneapolis.

Nancy J. Shea, '83MBA, is an associate product manager for General Foods Corporation, White Plains, NY. She lives in Norwalk, Conn.

Andrew M. Tataryn, '83MBA, is an attorney for the division of corporate finance, U.S. Securities and Exchange Commission, Washington, D.C.

Rick Wood, '83MBA, is a special risk account executive at Great American-South, Raleigh, N.C.

Pamela L. Byers, '84MBA, joined Associated Therapists, Inc., as vice president of operations in May. She lives in Boca Raton, Fla.

Mary A. Callahan, '84MBA, is a senior standard cost accountant with Honeywell, Inc., Hopkins, Minn.

Barbara Bernett Davis, '84MBA, is a marketing research analyst for Physicians of Minnesota, Minnetonka, Minn.

Marijo A. Goldstein, '84MBA, is a research analyst with Piper, Jaffray & Hopwood, Minneapolis.

Warren R. Goodroad, '84MBA, is a manager in financial and systems analysis for Midwest Financial Management, Inc., Edina, Minn. He purchased a new home in September, and his second child, Chad Oliver, was born in November.

Karen Hagmann Henrickson, '84MBA, is a programmer/analyst for Pillsbury, Minneapolis.

Loren Henrickson, '84MBA, is manager of pharmacy programs for CharterMed, Inc., Minnetonka, Minn.

Michael J. Jacowski, '84MBA, is a policy analyst for the Board of Governors of the Federal Reserve System, Division of Banking Supervision and Regulation, Washington, D.C.

David L. Johnson, '84MBA, is a systems engineer at IBM, Minneapolis.

Gary E. Johnson, '84MBA, is a financial consultant with NORENCO (NSP), Minneapolis.

Beth A. Langeslay, '84, is a sales representative for 3M Company, Bedford Park, Ill.

Sabine Philippe Lob, '84MBA, is a marketing specialist in software services with Digital Equipment Corporation, Geneva, Switzerland.

Marcia Korfhage Lockman, '84MBA, is director of marketing, Keewaydin Real Estate Services, Minneapolis.

Lori Peyer Lohman, '84MBA, is assistant product manager for Schaper Toys, Plymouth, Minn. She was married in September.

Marilyn H. McCarter, '84MBA, is manager, operations, of Senior Health Plan, St. Paul, Minn.

Pamela F. Olson, '84MBA, recently left her job as special assistant to the chief counsel-Internal Revenue to join the Washington, D.C., office of Spadden, Arps, Slate, Meagher & Flom as an attorney.

Jeffrey L. Paterson, '84MBA, is vice president for government securities trading at Norwest Investment Services, Inc., Minneapolis.

Charles E. Pratt, '84MBA, is a financial analyst with IBM, Rochester, Minn.

Nicholas J. Puzak, '84MBA, is a broker with Puzak & Sons, Real Estate, Minneapolis, which concentrates on market research and represents clients who are interested in buying real estate.

Randall L. Schiestl, '84MBA, is a senior program manager with Honeywell, Inc., Minneapolis. Since 1977 Schiestl has worked with Honeywell in production engineering, design engineering, and program management. He is married and has two children, Jennifer and Brent.

Sharon M. Schweikhart, '84MBA, is a Ph.D. student in the Department of Management Sciences, School of Management, University of Minnesota, Minneapolis.

Darrell G. Tilleskjoer, '84MBA, is an accountant with Honeywell, Inc., Hopkins, Minn. He married Leslie, '83, in April 1985. Their first child, Anthony Gary, was born in December.

Jon L. Vasatka, '84MBA, is an account representative for Frito-Lay, Inc., Redmond, Wash.

Hayward Y. Wong, '84MBA, works for Hennepin County, Minneapolis.

M. Joseph Axtell, '85MBA, is a portfolio associate for Prudential Equity Management Associates, Newark, N.J. He is preparing for the June 1986 chartered financial analyst exam.

Shawn M. Boyne, '85MBA, is a program coordinator for Bentley College, Waltham, Mass. She is responsible for marketing the college's microcomputer support specialist training program to the community. Boyne is also doing part-time consulting work and is an issues analyst with Joseph Kennedy's congressional campaign.

Larry Cantera, '85MBA, is vice president of finance for Hamilton Taft Company, San Francisco, Calif.

Bradley C. Dahl, '85MBA, is a programmer with Honeywell, Inc., Minneapolis.

Jeff J. Davis, '85MBA, is a consultant for Arthur Andersen & Co., Minneapolis.

Larry D. Ellingson, '85MBA, is controller for Red Lake Comprehensive Health Services, Red Lake, Minn. He participates in the Minnesota Society of CPA's Health Care Committee.

Kevin W. Finn, '85MBA, is an analyst-investments with Wood Gundy Inc., Calgary, Alberta, Canada.

Nancy C. Gruner, '85MBA, lives in Chula Vista, Calif. Her son, Daniel Strom Gruner, was born in March.

Kevin B. Hanstad, '85MBA, is a marketing research assistant for General Mills, Inc., Minneapolis.

Mark J. Herold, '85MBA, is an employee relations associate for Frito-Lay, Inc., Rosenberg, Texas.

Judith A. Holden, '85MBA, is an inventory planner for Land O' Lakes, Inc., Minneapolis. She lives in Cedar, Minn.

Jeanmarie Rehberg Iverson, '85MBA, is a marketing analyst with Fingerhut Corporation, Minnetonka, Minn.

Jeffrey A. Iverson, '85MBA, is associate systems programmer for The Toro Company, Bloomington, Minn.

Orlan V. Jennings, '85MBA, is section head of research and development, Beatrice Company, Fullerton, Calif.

Mikyung Kim, '85MBA, is EDP auditor with National Car Rental Systems, Minneapolis.

Thomas S. Latanision, '85MBA, is a sales and marketing representative for the Canadian Pacific Railroad, Minneapolis.

Stuart P. Levin, '85MBA, is an insurance industry marketing manager at Tandem Computers, Inc., Cupertino, Calif.

Christine Fong Lockwood, '85MBA, is management science analyst with Federal Reserve Bank, Minneapolis.

Mary L. Nowicki, '85, is an account executive for Hill and Knowlton Inc., Chicago.

Lizabeth E. Olson, '85MBA, works at Specchio Developers, Bloomington, Minn.

David C. E. Peterson, '85MBA, is an information systems consultant for Arthur Andersen & Co., Minneapolis.

Donna J. Radford, '85MBA, is business administrator for Talmud Torah of St. Paul, Minn.

William Rodriguez, '85MBA, is an account executive with Padilla and Speer, Public Relations, Minneapolis.

Laureen Ross McCalib, '85MBA, is a market research analyst for Northern States Power-Wisconsin, Eau Claire, Wis.

Jane Roettger Taffe, '85MBA, is a market research assistant with General Mills, Golden Valley, Minn.

Noreen Walen Thompson, '85MBA, is new project analyst for Physicians of Minnesota, Minnetonka, Minn.

Lisa Waldman Tovin, '85MBA, is a marketing analyst for Greeff Fabric, Port Chester, NY. She lives in Stamford, Conn.

Finn Aamont, '86MBA, is on the consulting staff of Arthur Andersen & Co., Minneapolis.

Susan E. Bies, '86MBA, is a financial analyst with Cargill, Inc., Minneapolis. She lives in Northfield, Minn.

Michael L. Bowyer, '86MBA, is a cost analyst with Ford Motor Company, Saline, Mich.

Christopher L. Coleman, '86MBA, is a pre-management trainee at Oscar Mayer Foods Corporation, Madison, Wis.

Alumni to page 22

Bette Abraham steps down as Alumni Advisory Council chair

At Business Day '86, Bette Abraham, '81MBA, stepped down as Alumni Advisory Council chair. She is succeeded by Kay Barber, '75MBA, management company controller, The Pillsbury Company.

Bette Abraham left her career as a counseling psychologist to enroll in the School of Management's newly revised MBA program in 1979.

As a student, Bette was elected president of the MBA Association. During her term, the association instituted programs that continue to be integral parts of the Minnesota MBA experience, including noon-time Corporate Forums, MBA student-sponsored Corporate Recruiter Receptions, and the annual MBA Commencement Program. As MBA Association president, Bette was an ex officio member of the school's Alumni Board of Directors. She was appointed by that board to a long-range planning committee and, as a result, was an architect of the current alumni leadership group, the Alumni Advisory Council, established in 1981.

Upon her graduation that same year, she was appointed to the Alumni Advisory Council, and in 1984 became its chair. Under Bette's leadership and because of her inspiration, the Council has been engaged in a number of far-reaching efforts, including—but not limited to—the following:

- Recruited several hundred alumni volunteers to “roll up their sleeves” and get involved in the day-to-day activities of the school;
- Established a number of alumni functional groups, including a Product Quality Committee, an Alumni in Small Business Committee, an MBA Program Advisory group, a Career Planning and Placement Advisory Committee, and an Alumni Programs group;
- Placed a variety of alumni events on the school's annual agenda, including alumni leadership workshops, receptions for alumni volunteers and for MBA alumni, and homecoming and reunion weekends;
- “Officially” brought alumni of the Executive Development Center into the school's alumni community;
- Formalized ongoing alumni representation on the school's Board of Overseers, the Undergraduate Program Advisory Board, the Business Board, the Business Day Executive Planning Committee, and on School of Management search committees. They've also initiated efforts to coordinate programming between the school's alumni and other University of Minnesota alumni groups.

Bette Abraham, a Minneapolis resident, is a partner in BUSINESS MATTERS, a consulting firm specializing in new business start-ups. She is—in addition to her current role as past chair and ex officio board member of the Alumni Advisory Council—on the boards of the Planning Forum and of the University of Minnesota Alumnae Society. She is a member of the Minnesota Chapter of the Association for Corporate Growth, the Cultural Activities Committee of the Minneapolis Chamber of Commerce, and Horizon 100.

Bette received the University of Minnesota President's Student Leadership and Service Recognition Award upon her graduation from the MBA program. She holds a B.A. degree from Lake Erie College, Painesville, Ohio, and a master's degree in psychology from the University of North Dakota in Grand Forks. “It will be difficult to fill Bette Abraham's shoes,” noted Kay Barber, who is beginning a two-year term as Alumni Advisory Council Chair. “The Alumni Advisory Council has initiated numerous programs and projects, and I'm delighted to have the opportunity to lead such an innovative group. We are going to continue existing AAC programs and plan to develop some new programs designed to enhance the student experience, especially in building an awareness among students that their alumni relationship begins while they're still enrolled at the School of Management. We encourage all alumni and students to be involved in AAC programs.”

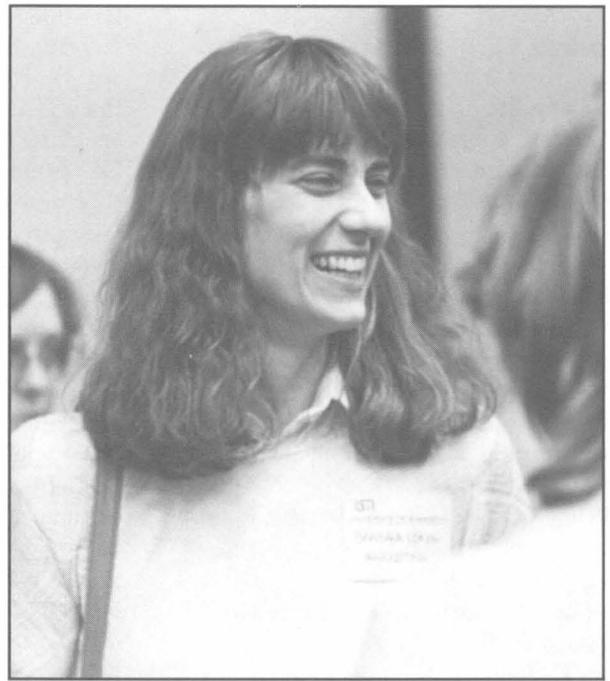
The next issue of the *Minnesota Management Review* will detail AAC activities and priorities. □



Bette Abraham



Kathryn Carlson, MBA marketing and admissions director, explains MBA programs. Right, Barbara Loken, associate professor of marketing, talks to prospective students.



School hosts reception for outstanding young women

Outstanding senior women from a variety of university schools received an introduction to the School of Management and explored the possibility of obtaining an MBA degree at a special women's reception hosted by the school last March.

Senior women with grade point averages of 3.2 or higher from the schools of Management, Journalism, and Fashion Design and Merchandising, and the Institute of Technology were invited to the late afternoon gathering that featured a welcome by Associate Dean Anne Benisch, a presentation of the MBA organization by Professional Management Programs Director Norman L. Chervany, and a panel discussion with program staff and alumni.

The reception was sponsored by the school's External Affairs Office, MBA program, and Alumni Advisory Council. More than 20 alumnae participated, answering questions and helping potential students explore their interest.

A wide variety of interest, expertise, and experience was represented on the panel. **Kay Barber, '75 MBA**, management company controller-Pillsbury Company and president of the Alumni Advisory Council, expressed alumni's continued interest in the MBA program's quality. She emphasized that alumni want to participate in the current student experience as mentors, career resources, or experience referrals.

Kathryn Carlson, director of MBA marketing and admissions, addressed the admissions process and criteria. **Noreen Chervanek, '85 MBA**, product manager-specialty products, GNB, shared that when she entered the programs as an American Studies undergraduate, she did not know the difference between marketing and finance. Her first year in the program dramatically illustrated the difference, and now, as manager of a several million dollar budget, she is operationally aware of the difference.

Susan Grafton, '81 MBA, Pillsbury Company, a BSB and accelerated MBA student, said her career path was enhanced and

clarified by the MBA program. And, **Jan Windmeier**, director of the school's Career Planning and Placement Office, answered questions about the kinds of companies that hire MBA's and how the school assists graduates through the placement process.

Associate Dean Benisch and the Alumni Advisory Council called the reception positive for those who participated. However, the real results will show when these people return as MBA students in the day and evening programs, Benisch added.

For more information about pursuing an MBA degree, call Kathryn Carlson, 624-9887. For more information about alumni involvement in similar programs, call Jeanne Katz, 625-1556. □



Kay Barber, new Alumni Advisory Council Chairwoman

Alumni from page 19

Teresa S. Earl, '86MBA, is a commercial lending trainee at First Bank, Minneapolis.

Denise M. Engebretson, '86MBA, is a staff consultant for Arthur Andersen & Co., Minneapolis.

Neal C. Erickson, '86MBA, is a commercial lender with First Bank, Minneapolis.

H. Brandon Guest, '86MBA, is a senior systems analyst with Control Data Corporation, Plymouth, Minn.

Gregg A. Gittus, '86MBA, is a systems analyst for Eli Lilly and Company, Indianapolis, Ind.

Michael A. Greenstein, '86MBA, works in internal audit, Pillsbury Company, Minneapolis.

Stephen J. Hastings, '86MBA, owns Hastings Realty, Inc., Minneapolis.

Joni E. Jallo, '86MBA, is a commercial lending officer for First Bank System, Minneapolis.

Kristine M. Johnson, '86MBA, is a senior quality engineer supervisor for 3M, St. Paul, Minn.

Deryck A. Jolstad, '86MBA, is a member of the tax staff at Arthur Andersen & Co., Minneapolis.

Gay Ann Jorgensen, '86MBA, is a management consultant for Arthur Andersen & Co., Minneapolis.

Greg J. Lawler, '86MBA, is a staff consultant for Arthur Andersen & Co., Minneapolis.

Sarah F. Leaver, '86MBA, is director of marketing, Midwest TB Publications, Minneapolis.

Daniel B. Marcotte, '86MBA, is a staff consultant at Peat, Marwick, Mitchell and Company, Minneapolis.

Laura J. Miller, '86MBA, is a marketing assistant at First Bank System Bank Card Center, Minneapolis.

Karen A. Mills, '86MBA, is a buyer for Millston Corporate, Indianapolis, Ind.

John D. Moody, '86MBA, works at McMaster-Carr Supply Company, Elmhurst, Ill.

Dale J. O'Donnell, '86MBA, is a programmer analyst with Hewlett-Packard, Palo Alto, Calif.

Peter B. O'Kelly, '86MBA, is a management systems analyst for The Procter and Gamble Company, Cincinnati, Ohio.

Lance D. Redfield, '86MBA, will join Irving Trust, New York, as a professional bank officer in July.

Thomas L. Roach, '86MBA, is a sales representative for Procter and Gamble, Minneapolis.

Amy L. Stern, '86MBA, will join 3M in St. Paul, Minn., as a marketing analyst in August.

Nora C. Whiteman, '86MBA, is a branch administrator for Citicorp, Minneapolis.

Hirokazu Yuihama, '86MBA, will join Yamaichi Securities, Inc., in Tokyo, Japan. □

Calendar of Events

Alumni, mark your calendars now for upcoming School of Management events. All alumni are invited to the following:

- Alumni Leadership Workshop, Saturday, September 20, 1986, 9 a.m. to 2 p.m., Humphrey Conference Center, West Bank. This is the time for interested alumni to become involved in strategies for alumni programs and activities during the coming year.
- Reunions and Homecoming, Friday and Saturday, October 10 and 11, 1986. Reunions for the class of 1936 (1935 and 1937 included), class of 1946 (1945 and 1947 included), and class of 1981 (BSB and MBA).
- MBA Reception, Wednesday, November 5, 1986, 5:30-7:30 p.m., Alumni Club, 50th floor, IDS Tower, Minneapolis.
- 1987 Business Day, Tuesday, April 21, 1987, Radisson St. Paul Hotel, 1 p.m.-8 p.m. All alumni are encouraged to attend; watch for details in future *MMR*'s.

For more information, call the Alumni Relations Office at (612) 625-1556.

27th Annual

BUSINESS DAY

April 21, 1987
Radisson St. Paul Hotel

For more information call Jeanne Katz, (612) 625-1556

B-Day from page 8

important as strategic planning and all other elements that go into a successful business experience.

“Corporate status is a privileged status in our society,” Andersen said. He said that the society that instills that status is entitled to specific returns. “The first return should be a necessity for that corporation to exist to serve society with products, services, or other ways that society may not otherwise have as well.” Business has a definite responsibility toward society, he added; its first priority is the customer.

A program interpretation, “Business and the Search for Ethics,” was lead by R. Edward Freeman, philosopher and management professor. He has written extensively on the role of stakeholders in strategic planning and business ethics. Freeman was voted “Teacher of the Year.” Outstanding instructor awards went to marketing lecturers Dennis Misurell and the late Robert Lieberman. Bill Tarnacki of Ford Motor Co. was voted “Recruiter of the Year.”

The afternoon featured a variety of concurrent sessions with discussion ranging from applying a code of business ethics to questions of Third World marketing, corporate takeovers, white-collar crime, privacy, bankruptcy, marketing, and career planning. Local management executives, alumni, and faculty led the sessions.

Speech-communication professor George Shapiro led a special personal ethics session, “Through the Looking Glass—An Evaluation of Personal Values.” School alumni facilitated the groups. They included: **Ann Wigginton, Sally Scheefe, Lynne Medcalf, Ted Scheunemann, Frank Abramson, David J. Biemesderfer, Robert A. Bjork, Joel Erlandson, Lester Gable, Elizabeth Schlosser Feuerstein, Patricia Genereux, Rolland E. Glessing, Ildiko Gyorky, Tom Maetzold, Joe Mork, Tom Mungavan, Daniel P. O’Shea, Diane Prohofsky,**

Jim Rustad, Thomas L. Schlick, Susan Showalter, Paul Stormo, Bernard S. Tuohy, Dale F. Weeks, Paul A. Wilkus, Paul F. Wolner, Randy Zats, Krista M. Debelak, Susan Hoffman, and Rita Johnston.

The day concluded with a social hour and banquet where the school recognized and honored Bette Abraham, retiring Alumni Advisory Council Chair, for her extensive and notable volunteer involvement. The banquet also featured the announcement of the magnificent Carlson gift. (See box page 4.) □

Lieberman memorial established

School of Management faculty and students were saddened by the sudden death of marketing Ph.D. student Robert Lieberman last spring. Lieberman, a former marketing vice president at Leisure Dynamics, died of an apparent heart attack.

Lieberman was heavily involved in undergraduate teaching and took great interest in it. Because of his dedication to undergraduates, marketing graduate students and faculty established the “Robert Lieberman Award for Undergraduate Teaching” in his honor.

Interest from contributions to the Lieberman Fund will be awarded annually to one or more marketing Ph.D. students who receive outstanding teaching evaluations by marketing undergraduates. Recipients will be listed on a plaque in the marketing department.

Contributions via check may be mailed to Catherine Bjerkebek or Bill Rudelius, Marketing Department, University of Minnesota School of Management, 271 19th Ave. So., Minneapolis, MN 55455. For more information contact Bjerkebek at 624-7898 or Rudelius at 624-6081. □

Alumni Update

Information furnished by alumni on this form will be used for the “Alumni Update” section of the *Minnesota Management Review* and will help the school maintain accurate home and business address records. Send to: Jeanne Katz, director, alumni and development, School of Management, University of Minnesota, 271 19th Ave. S., Minneapolis, MN 55455.

Name _____ Date _____
(First) (Middle or Maiden) (Last)

Year of Graduation and Degree(s) granted from School of Management _____

Employer _____ <small>Position</small>	Home _____ <small>Mailing Address</small>
_____ <small>Company Organization</small>	_____ <small>City, State, Zip</small>
_____ <small>Mailing Address</small>	_____ <small>Phone</small>
_____ <small>City, State, Zip</small>	
_____ <small>Phone</small>	

Information you would like to share with the School of Management (career, family, awards, weddings, births, trips, mini-reunions, etc):

EXECUTIVE DEVELOPMENT CENTER

... a provider of quality professional management education to individuals and their organizations through the University of Minnesota's Graduate School of Management.

1986-1987 Residential General Management Programs

MINNESOTA EXECUTIVE PROGRAM (MEP)

Designed for executives with corporate or major division responsibilities, the MEP focuses on corporate strategy in the areas of marketing, finance, operations, and organizational design. The six-week module format maximizes interaction among participants and faculty. An optional prefinance seminar that deals with basic knowledge of financial statements and terminology is available for nonfinancial executives.

Modular format; begins August 1987.

MINNESOTA MANAGEMENT ACADEMY (MMA)

Designed for newer managers or professionals with technical backgrounds who are assuming management roles, the MMA focuses on general management principles, finance, communication/interpersonal skills, and information systems. Managers attend for 8 days in a residential format. Offered twice annually.

October 4-11, 1986

March 21-28, 1987

MINNESOTA MANAGEMENT INSTITUTE (MMI)

Designed for operating-level managers who must translate organizational strategy into bottom-line results, the MMI concentrates on operating management programs in the areas of management control, finance, marketing, operations, information systems, human resource development, and business-government relations. Like the MEP, the MMI stresses integration among areas with more time spent on problem-solving approaches within a single area. The four-week modular format accommodates the hectic schedule of the typical operating-level manager. An optional prefinance seminar is also available for MMI participants.

Modular format; begins February 1987.

Information Request Form

_____ Yes, I am interested in more information on the residential general management programs I have indicated above.

_____ Yes, Please ADD MY NAME TO THE EXECUTIVE DEVELOPMENT CENTER LIST to receive information on EDC programs.

NAME _____ TITLE _____ ORGANIZATION _____

STREET _____ CITY _____ STATE _____ ZIP _____ COMPANY PHONE () _____

SEND TO: Executive Development Center, School of Management, University of Minnesota, 271 19th Ave. S., Minneapolis, MN 55455.

MINNESOTA MANAGEMENT REVIEW

School of Management
University of Minnesota
271 19th Ave. S.
Minneapolis, MN 55455

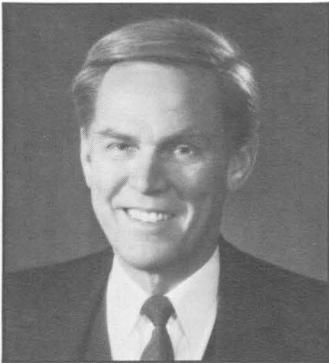
ADDRESS CORRECTION REQUESTED

Nonprofit Org.
U.S. Postage
PAID
Minneapolis, MN
Permit No. 155

M00030641 B 04 2
UNIVERSITY ARCHIVES
UNIV CF MINN, 10 WA LIE
117 PLEASANT ST S E
MINNEAPOLIS, MN 55455

Minnesota Management Review

December 1986



Duane Kullberg

If a fortuneteller had told Duane Kullberg when he graduated in 1954 that one day he'd be CEO of a large world-renowned accounting firm, Kullberg said he would have "just laughed." Kullberg joined Arthur Andersen & Co. right after college, was admitted to the partnership in 1967 and elected to his current position as managing partner - CEO in 1980.

One of many outstanding School of Management alumni, Kullberg shares his thoughts on education, professional success and international management.

Duane Kullberg decided to major in accounting when he was a freshman. He enjoyed his classes, did well in school and graduated with honors. But after a couple of years on the job, he considered changing careers. "I didn't like my work very much at first," he admitted, "and I wasn't the top performer I had been in school."

Two years in the military and a more mature outlook made the work more appealing when he returned to Arthur Andersen. Now Kullberg advises people at the start of their professions, "Don't be too critical too soon. If I had followed my initial reactions to my job, I wouldn't be where I am today."

Kullberg attributes his ultimate success to good personal skills and the willingness to go beyond the basic technical requirements. "What you learn in the classroom is important, but you have to go beyond that and develop other skills as well. I'd say that now the technical side of my job is 10 percent. All other aspects, such as maintaining the business and working with people, take up 90 percent of my time."

Kullberg compared the challenge of doing well at a good school like Minnesota to what an individual faces on the job. "Passing isn't hard, but to get really good grades takes something extra," he said. "In the same way, it's easy enough to get by

and stay in your job, but getting ahead takes more. At times when I was at the university, I wished I had gone to an easier school, but that wouldn't have prepared me as well."

As head of a firm with offices in 49 countries, Kullberg must understand international affairs. He serves on the board of the U.S. Council for International Business, the Chicago Council on Foreign Relations and the U.S.-Japan Business Council, putting him in a position to affect the international business climate. "You have some influence when you represent a large worldwide organization whose opinions are respected," he noted. "For example, when we're discussing trade issues, I know firsthand what kind of economic climate our

clients face and can contribute this knowledge."

Although preparing for international management wasn't part of the business school curriculum in the 50s, Kullberg feels that his college experience helped him in another way. "The important point then, as now, is 'Does the atmosphere on campus prime you for wanting to learn more about the world?' If it's the right kind, it makes you want to learn more. You learn as much outside the classroom as in."

In addition to his professional work, Kullberg participates in many cultural and educational activities, including an exemplary commitment to his alma mater. A member of the Minnesota Foundation, Kullberg also serves on the Board of Overseers of the Carlson School of Management.

Kullberg supports university President Kenneth Keller's vision for the university and is dedicated to helping the Carlson School of Management become one of the nation's top five public business schools. "In a public institution, the margin of excellence you're going to get must come from private support," he urged. "This support is necessary to move a school beyond fulfilling basic education needs into being something more."

"And it can happen here," he added. "It's a great school." ■

Arthur Andersen & Co.-Duane R. Kullberg Chair in Accounting and Information Systems

The partners of Arthur Andersen & Co. announced earlier this fall a donation of \$500,000 for the first fully endowed chair in accounting at the Carlson School of Management. The gift will be matched with an additional \$500,000 from the Permanent University Fund.

The position will promote cooperative research in financial accounting, managerial accounting and management information systems and will be designated the Arthur Andersen & Co.-Duane R. Kullberg Land Grant Chair in Accounting and Information Systems, a reflection of Kullberg's support of broad-based computer applications in the accounting practice.

Arthur Andersen & Co. was the first commercial establishment to install a computer in 1953, according to Kullberg, managing partner and CEO of the company. "The rise of the MIS practice within accounting has caused the biggest change in the field since the 70s," he noted. "I strongly encourage research to advance this kind of development even further, which is why the chair has been designated a joint research position."

CONTENTS

Minnesota Management Review
December 1986, Volume 5, Number 4

1

Profile of an alumnus

Duane R. Kullberg talks about education, success and international business.

3

Early warning systems

Study by Jack Gray shows how early warning systems help predict financial trends in business.

4

Northwestern Bell project report

Industrial Relations Center and Northwestern Bell cooperate in a major evaluation of job classifications and compensation.

5

Deterring computer crime

Computer abuse can be reduced. A study by Detmar Straub shows how.

6

Another chance at an MBA

Through the Manager's MBA Program, students take Fridays to attend class, with tuition paid by their employers.

SPECIAL REPORT

A look at the Curtis L. Carlson School of Management

This special 20-page section looks at the school's many elements, with special thanks to our donors.

DEPARTMENTS

2 Message from the Dean

7 Faculty Update

9 Alumni Update

The **Minnesota Management Review** is published by the External Affairs Department for alumni and friends of the Curtis L. Carlson School of Management, University of Minnesota. Direct correspondence to: Martha Douglas, editor, **Minnesota Management Review**, Office of the Dean, 271 19th Avenue South, Minneapolis, MN 55455. Telephone: (612) 625-0843.

External Affairs Department:

Anne M. Benisch, associate dean, External Affairs
Martha Douglas, director of Communications
Jeanne Katz, director, Alumni and Development
Julie Heupel, director, Corporate Relations
Jan Windmeier, director, Career Planning and Placement

Minnesota Management Review was designed by Dawn Mathers. Special assistance was provided by Laurel Christianson, Office of the Dean; and Darlene Gorrill, University Relations.

from the dean

What's in a name?

*Identification with a benefactor
can enhance a school's reputation*

by Dean Preston Townley



The first collegiate business school in the country opened its doors in 1881 at the University of Pennsylvania. It carried the name of the benefactor whose donation made it possible, Joseph Wharton. Today the Wharton School is known as one of the world's top business schools. There may be a parallel here for our own newly named Carlson School of Management.

With my background in fund-raising for my own alma mater and with a keen awareness that higher education greatly needed funding, one of my first thoughts when I came on board here in 1984 was to address the School of Management's dual needs of resources and reputation with one focused effort. It was clear to me that to continue the improvements begun in the 1970s, the school needed to significantly increase its resources each year well into the 1990s. As far as reputation was concerned, it needed enhancing.

In researching the distinctive names given to business schools around the country, we found tremendous variation in how names were chosen. But one pattern emerged: The better schools were named after a benefactor whose contribution was significant in establishing or advancing the school. This was so for Wharton at Penn and Tuck at Dartmouth in the past, and Fuqua at Duke and Kellogg at Northwestern in the present. With this in mind, we recommended that the university approach Curt Carlson, a prominent alumnus whose record of success embodied what I hoped the school should stand for in the minds of students, faculty and supporters. The rest, as they say, is history. All who heard the idea—including the most important listener of all, Curt himself—were receptive and enthusiastic.

Our identification with Curt Carlson communicates direction and purpose. This identification with a successful alumnus whose

career embodies the best of what our endeavors provide, whose family and personal life are exemplary and whose success derives from pure entrepreneurial effort, gives our school a jump forward in gaining the reputation we seek. Performance is up to us, but we now have the identity that draws attention.

When contemplating this undertaking, I was conscious of the risk that linking the school with one individual's name might shut off gifts from others or suggest that the school was "taken care of." Enhanced we definitely are by Curt's generous gift; "taken care of" we certainly are not. As you will see in the enclosed special report, the income from Curt's endowment, when fully in place, will approximate seven percent of our total current expenses. This amount means a great deal on the margin when applied to incremental chairs, professorships and other new activities. However, it will not in any way replace funds for the more than one-third of our ongoing efforts that come from sources other than legislative and tuition revenue.

Support for our school from outside donors has been tremendous over the last eight years. We would not be where we are today without it. I encourage you to read over the list of individuals and companies in the report. And there are many not currently listed who gave generously in the past. For all of these, I am deeply grateful, and I sincerely hope such generosity continues.

Please note the enclosed envelope for mailing a year-end donation . . . we will put it to good use. And if you are interested in other naming opportunities, such as the newly established Arthur Andersen - Duane R. Kullberg Land Grant Chair in Accounting and Information Systems, you know who to call. Just pick up the phone . . . ■

Early warning systems help managers predict financial trends in business

by Miriam Feldman

A combination of tougher drunk driving laws and a more temperate public attitude toward alcohol caused liquor sales to drop at one restaurant chain. In the past, 45 percent of total restaurant revenue came from liquor sales, but in the future, alcohol will account for only 35 to 40 percent. Such change could mean serious financial loss for a company, but the managers at this chain were ready. They developed new entrees to increase food sales and offset the decline in liquor sales.

The strategy worked. The chain bounced back with the help of an early warning system, a reporting system that alerts management to potential opportunities and problems before they affect financial statements. An early warning system looks forward to changes that might occur in the next two to three years, thus covering ground somewhere between the annual operating plan and the five-to-ten year horizon of strategic plans. It demands that managers know what information they must track to succeed.

Accounting professor Jack Gray and accounting lecturer Diane Matson recently completed a study of early warning systems in a number of large organizations. Through personal interviews with controllers and financial managers, they found that all of the organizations had an early warning system, although the system may not have been identified as such.

Gray predicts a trend toward formalization of early warning systems. In fact, the study was prompted by a request for a formal statement on early warning systems from the National Association of Accountants. After the association reviews the study, it plans to issue a Statement of Management Accounting Practices to members. "We think that more organizations could benefit from having a formal early warning system," Gray said.

The study outlines seven steps necessary to design an early warning system.

- Management must be realistic about what an early warning system can do. It can-



An early warning system looks forward to changes that might occur in the next two to three years. It demands that managers know what information they must track to succeed.

not predict the future, but it can identify trends. Success will be enhanced if a key member of top line management champions the system.

- The industry in which a division or company operates must be defined, so that the correct industry trends are selected.
- Key variables must be selected. The heart of the early warning system, these key variables determine what will or won't be tracked. They vary greatly from industry to industry, but once identified, they should not change very often. There is no generic list of key variables, but as an example, one group controller tracked growth in the market share, the number and age of students in schools, factory costs, turnovers and return on capital.
- Decide how to measure the key variables. Questions to consider are: How will a change in market share be measured? How will productivity be measured?
- Decide how the data will be compiled and who will do it. Which departments will provide data? What other sources will be used? All the people affected by the

early warning system should be involved in the design, because their support and understanding of it are crucial to the system's success.

- Implement the early warning system.
- Evaluate it. Is the system working as planned?

Once in place, managers should be able to use the early warning system to detect changes—such as in drinking habits—that could have an impact on the bottom line. "If that change begins to occur, it's not going to occur overnight, so the important thing is to detect that shift at the earliest moment possible," Gray said.

The early warning system should alert managers to developing trends. "It's not going to give you a yes or no answer," he added. "What it's going to do is raise the issue, and then managers are going to have to sit down and assess what's going on." ■

Jack Gray's research was funded by a Minnegasco/Paul R. Doelz Faculty Enrichment Award, provided in summer 1986. Established in honor of the company's former CEO Paul Doelz, the annual Minnegasco award supports academic research that involves direct contact with the business community. The National Association of Accountants provided additional funding for the project.

Miriam Feldman is a free-lance writer working in the Twin Cities.

Northwestern Bell project achieves information and research goals

by Martha Douglas

The divestiture of local phone services to the newly formed regional companies created a unique research opportunity for the Industrial Relations Center (IRC). For the first time, in 1986, collective bargaining negotiations with the Communications Workers of America (CWA) would be the responsibility of Northwestern Bell Telephone (NWB), rather than AT&T. For the CWA, negotiations with NWB meant that issues of particular importance to its members in NWB's service area (Iowa, Minnesota, Nebraska, North Dakota, and South Dakota) could be emphasized more directly.

Both NWB and the CWA recognized as early as 1984 that the collective bargaining environment, communications technology and state regulations were all in flux. NWB expected installation and maintenance jobs to increasingly involve electronic and fibre optic applications as electro-mechanical technologies were being phased out. The regional operating companies (in NWB's case, U.S. West) predicted reduced state regulations, increasing the need to be competitive in both the service and labor markets.

In negotiating a new agreement, both NWB and the CWA were concerned about how jobs should be compensated. They were interested in how their wages compared to labor markets in which NWB had facilities, in how newly created jobs requiring new skills should be slotted and in how job requirements influenced the rates of pay for that job. Since many jobs in NWB are unique to the organization, extensive information about typical nonsupervisory, non-professional jobs in a cross section of upper Midwest employers was required to make a comparison.

Realizing that a major academic institution would have the expertise and neutrality necessary for obtaining and analyzing this kind of information, NWB and the CWA invited three universities in the Midwest to compete for the project. Three weeks later IRC Director Mike Bognanno submitted a research proposal that outlined precisely how the center would conduct the analysis, together with a management plan and cost analysis that would dedicate fulltime staff to control the project. He convinced them. Over the next 18 months, 8 faculty members, 51 graduate students and several staff members became involved in the project.

IRC's task was to identify private sector employers in cities where NWB had signifi-

cant installations and to analyze a cross section of their jobs so that a joint NWB-CWA job evaluation team could score the job components under a newly created evaluation system. Job components in the scale included keyboard or communications skills, systems reasoning, persuasion, safety skills, use of tools and other factors.

Bognanno, IR faculty members Richard Arvey and John Fossum, Project Manager Dave Estenson and Assistant Project Manager Ann Carey began contacting companies, giving presentations and asking them to participate. "We ultimately visited a wide range of employers, from diversified high-tech companies in the Twin Cities to a small trucking firm in South Dakota," said Fossum.

The participating companies agreed to supply IRC with wage information and to let an IRC researcher come into their workplace to interview employees about their jobs and skills. This meant significant administrative input from the companies, as well as time off the job for employees being interviewed. In return, they could have access to survey results. All company and employee names were kept confidential. "We got very good cooperation from employers, especially in the Twin Cities," Fossum reported. "I think IRC's strong relationships in the area helped a lot in getting it."

While project managers solicited cooperating companies, IR graduate students were trained in the special job analysis technique that had been designed for this project by Dr. Will Manese of Bell Communications Research. He taught them to interview supervisors and employees and to prepare detailed job evaluations that would enable offsite evaluation of the job without reference to its title, location or employer. The job descriptions these analysts prepared ranged from 5 to 80 pages.

Over the course of the project, the center hired and trained 51 graduate students to conduct the surveys and write job descriptions. Project Manager Dave Estenson feels that involving graduate students to such a great extent was a very successful part of the project. "We provided funding to almost a third of our graduate students and they acquired important interviewing and writing skills in the process," he explained. "Several recruiters commented on the value of this experience during campus interviews."

Fossum agreed. "While conducting interviews, they were out on their own doing

the work; they had to learn to relate to people and to deal with a potentially sensitive situation. And, they were collecting information about job attitudes along with concrete data, and had to be sensitive as to which was which."

Analysts interviewed two or three job-holders and their supervisors for each job. They wrote detailed job descriptions and then went back and verified them with supervisors and employees as a group.

The verified job descriptions were sent to the NWB-CWA evaluation committee, where points were assigned to specific criteria that related to jobs within the company. The original research proposal contained a process to arbitrate cases where agreement could not be reached. Probably due to the combined high level of cooperation among evaluation team members and the clarity of the job descriptions, this alternative was never needed even though the evaluators examined 271 jobs within 43 different companies.

After all of the evaluations had been completed, IRC researchers examined the relationship between the evaluation scores and pay rates reported in the market. Differentials associated with type of industry, size of the city in which the job was located and union-nonunion status of the job were identified and provided to NWB and the CWA for use in their negotiations.

But the project doesn't end with the final report to Northwestern Bell. In his initial proposal, Bognanno stipulated that along with the wage information NWB required, the IRC should also be allowed to gather information regarding individual knowledge, skills and job attitudes and information about how employers perceived their labor markets. He organized the IRC faculty into teams to design the technical aspects of the proposal and the information needs for future research. Faculty involved in this process included Dennis Ahlburg, Paul Schumann, Richard Arvey, Mahmood Zaidi, Howard Miller, John Fossum, Jeylan Mortimer (sociology and industrial relations), and Bognanno.

"In many ways our work with Northwestern Bell was an ideal research project," commented Fossum. "The supporting company was pleased with the final report. It came in on time and under budget. We were able to provide valuable financial assistance and experience to graduate students. And we now have extensive data to use for further research." ■

Deter computer abuse: it may prevent business failure

by Maggie Aitkens

John, an employee of a major organization, didn't get along very well with his supervisor. Twice after heated discussions he slipped unseen into the computer room, opened up the system and placed a penny on one of the computer boards. The computer was shut down, and so was business. The two pennies cost the company more than \$100,000. John was never caught and may still work at the same place—that is, if he hasn't destroyed the business first.

Computer abuse is a continuing national problem, according to a study recently conducted by Detmar Straub, assistant professor of management information systems. The first validated empirical study in the computer security field, it examined the extent of computer abuse in the U.S. and the effectiveness of computer security systems. "In essence, entire businesses can be severely harmed and even destroyed by the push of a button or, in this case, the placement of a penny," Straub said.

John's actions may have been malicious, but maliciousness ranked lowest on Straub's list of four reasons for computer abuse. First on the list is personal gain, Straub explained. "Employees may do anything from setting up dummy accounts to which they send themselves checks drawn on the corporate account, to setting themselves up in a private business using the corporation's computer systems for their personal gain."

The second most frequent cause for computer abuse is ignorance. Improperly trained employees may make harmful, irreparable mistakes while inadvertently violating security or wreak havoc through misguided playfulness or practical jokes. In one case, Mary came into work one day and found that all of her disks had been wiped clean. Her colleague, who had moved all the information to another set of disks during her absence, chuckled in the corner office.

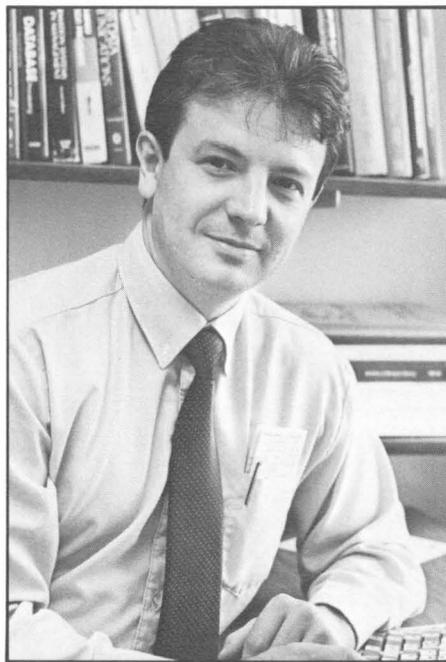
Straub did not find evidence in his study to support the most common claims that people with privileged access are more likely to abuse the system than others. He also found that the likelihood of computer abuse does not necessarily increase if two or more people conspire to violate a system, as is commonly thought, or that past abusers will necessarily continue to abuse.

In his research, Straub studied information gathered from Data Processing Management Association (DPMA) members representing 1,211 separate organizations.

He found that educational institutions, wholesale and retail trade and utility companies are most susceptible to computer abuse. In addition, larger electronic data processing departments experience more abuse than smaller organizations. "One explanation for this could be a function of size," he commented. "The more people using a system, the more likely the system will be violated."

Grounded in criminological General Deterrence Theory, which argues that if you sanction people, they will commit fewer crimes, Straub's research showed that certainty and severity of punishment definitely reduce the amount of abuse. Increasing the certainty of punishment for abuse proved slightly more effective than increasing the severity of punishment in the cases he studied.

"Most Americans know that if they cheat on income taxes, chances are they will get caught and suffer severe penalties," Straub said. "The IRS, on the other hand, knows that if they weren't as thorough in catching these violators, or if they imposed lesser penalties, more people would cheat on their taxes. Effective means to deter computer



Detmar Straub, who joined the Department of Management Sciences this year as assistant professor, looked at more than 1,200 computer security systems for his study on deterring computer crime.

abuse function in much the same way."

Employee perception of certainty can be enhanced through certain administrative practices Straub calls "deterrent controls," such as widespread distribution of policy statements that specify conditions for proper use of the system and/or computer security awareness training sessions.

Large, full-time, highly visible security staffs prove a very effective deterrent control and also can train and educate employees in computer use, develop security packages to monitor usage, assign passwords and determine which files, data and programs would be available to each user, Straub said.

Systems with security software that denies or allows access to certain people experience markedly fewer abuses than those without. "This was a finding I expected, and one which has now been confirmed by this study," Straub said.

To his surprise, Straub found that only 60 percent of the organizations surveyed have even preliminary security in place, with the health care industry at the bottom of the list. Straub believes that many of these organizations are not only at risk, but seem to be taking unnecessary chances. Lack of information about security may account for much of this sluggishness, Straub noted. Formally trained security personnel do not yet exist in the workplace, or if they do, they frequently come from a variety of backgrounds. Employers often don't know what to look for in hiring security personnel or even how to define these positions.

"On the other hand," Straub commented, "it is possible to speculate that organizations might simply prefer to turn away from and ignore a problem that has not yet affected them. Unfortunately, some will not be given a chance to implement security systems if they wait—their businesses may be destroyed first. Failing to take preventive measures may be equivalent to a town that decides to support a fire department once the entire area has been wiped out by flames."

Straub feels that the U.S. has entered a new dimension in computer use, "a democratization of technology unprecedented in human history, where it is becoming even more important for an organization to protect its information than it is to protect its material goods."

The Institute for Research on Management and Information Systems (IRMIS) at Indiana University and the Ball Corporation Foundation provided funding for Detmar Straub's research. The results will be officially reported through the Data Processing Management Association's Compufax and/or Data Management publications.

Maggie Aitkens is a free-lance writer working in the Twin Cities.

Photo by Tom Foley

Managers' MBA program gives you another chance at an MBA

by Drew Darling

It's a familiar pattern. Employees, highly trained in their specific fields, advance through a division of their company learning additional skills as they go. After 10 or 20 years, however, they're tapped for upper-management positions, and they suddenly need "big-picture skills" such as financial management and accounting, corporate strategy, product policy and management information systems.

They welcome the advancement, but where will they get the skills? Who at the age of 33, 43, even 53, can afford to go back to two years of day school or five years of night school for an MBA? Should the position instead be given to a recent MBA graduate still wet behind the ears?

One solution is an MBA program for mid-level managers who attend classes all day once each week for two years. In 1974, about 10 schools across the country offered executive's or manager's MBA programs. Now nearly 100 do.

The Carlson School of Management's program began its sixth year this fall with 56 students, ages 32 to 60, from health care, education, government, publishing, utilities, science and industry, all of whom have at least 8 to 10 years professional or managerial experience. The curriculum aims toward general management skills and covers management-accounting, statistics, decision-information systems, organizational behavior and economics, with emphasis on communication skills. It blends formal education with practical experience by organizing the class into groups of four or five students who meet once each week on their own to prepare presentations, coordinate work on smaller projects and to relate their outside experiences to coursework. Each quarter several senior managers visit the classroom, lending their practical experience to class topics.

Companies release their employee one day a week to attend class and typically foot the tuition bill. Yet in the remaining four-day work week, students must keep up with the same job responsibilities and complete a full-time course load that requires 20 to 25 hours of study each week.

"I didn't think I was going to have to work this hard. I didn't expect it would require as much pain and effort," said James D'Angelo, director of the Children's Residential Treatment Center of Abbott-



Photo by Nancy Johnson

Donald Beimborn, Mary Jo Hubner and James D'Angelo attend Manager's MBA classes on Fridays and hold down regular fulltime jobs the rest of the week. Mary Jo commutes from Mankato, where she is director of Physical Medicine and Rehabilitation at Immanuel-St. Joseph's Hospital.

Northwestern Hospital in Minneapolis. "Most of us have been out of school 10 and 20 years. It's a strange experience to sweat over grades again. Most are used to giving out the evaluations. For people who think they know it all, to get 3 points out of a possible 40 can be a rather humbling experience."

Once each quarter the students stay in an area hotel for a three-day conference. The "motivational" session in September helps the students get to know each other and ease back into the swing of studying, said program coordinator Mary Schaub. Repeated in January and again in March, the sessions serve to recharge the students. They leave the pressures of work and home and concentrate on their studies all day Wednesday, Thursday and Friday.

The program begins the first week in September and finishes in early June. Students carry 12 credits, or three classes, each quarter. On Fridays they assemble in the classroom from 8 a.m. to 5 p.m. Classes cover one subject in the morning, another in the afternoon, with lectures, question and answer periods, case discussions and small group meetings.

While increasingly popular, the program never has been simple. Head of Alpha Editions Donald Beimborn, who contracts his services as a managing editor to Burgess International publishers, understands this. Beimborn earned his master's degree in botany-zoology in 1967 at the University of Wisconsin and his doctorate in ecology from

the University of Minnesota in 1974. "Graduate school in the sciences was easy in comparison," he said. But the instructors here are top drawer. They're highly motivated and they do a great job. It's almost impossible while working full time to gear up to go back to school—back to studying, taking tests, writing papers and sitting in class. But the university has made it as easy as possible." The bureaucracy? "They've made it transparent," he said.

The university registers the students, buys and mails their books to them, even buys and serves them lunches on Friday.

The cost of Minnesota's two-year program is \$14,000. In the field of 19 leading programs, tuition ranges from \$11,000 at the University of Pittsburgh to \$30,000 at the Wharton School of Business (University of Pennsylvania) and at New York University.

Approximately two-thirds of the students are sponsored completely by their company. Another 15 percent are partially sponsored. For the remainder, such as D'Angelo and Beimborn, tuition is an out-of-pocket expense.

"The program works," said Beimborn. "It is designed for generalists, so you can't adapt the coursework to fit your own specialties, but that seems a small sacrifice." ■

If you are interested in discussing the Manager's MBA program further, call Kathryn Carlson, MBA director of Marketing Services, (612) 624-6006.

Drew Darling is a university news service writer.

A look at the Curtis L. Carlson School of Management

Many elements work together to make up an institution like the Curtis L. Carlson School of Management. This special report looks at those elements, reviewing the highlights of the 1985-86 academic year and giving a glimpse of the school's future direction.

Much of this activity wouldn't be possible without the support of donors: corporations, foundations, alumni and friends, including many who give both their time and money. The individuals and organizations who contributed to the school in 1985-86 are listed on pages 11-18 of this report as a special recognition and thank-you.

The school's beginnings

Founded in 1919 with 14 faculty members and a student enrollment of 88, the School of Business Administration at first offered only B.S. and M.S. degrees. Resident tuition was \$30 per quarter. One year after its founding, the school became one of the first in the nation accredited by the American Assembly of Collegiate Schools of Business (AACSB).

The master of business administration (MBA) degree was first authorized in 1935 and the doctor of philosophy (Ph.D.) degree in 1948. A separate master's program in industrial relations was established in 1956 and was followed by a Ph.D. program in industrial relations less than 10 years later.

In 1960, the evening MBA program began, making it possible for business professionals to combine a full-time job with advanced study in the field. In 1978, the college established a master of business taxation (MBT) program in conjunction with Continuing Education and Extension.

Students who graduated before 1938 will remember the classrooms and offices of Eddy Hall, where the school was first housed. The next home was Vincent Hall. With increasing faculty size, new programs and the establishment of research centers, temporary buildings housed some instructors and teaching assistants. In 1963, the school moved to its current home in the West Bank's Management and Economics



Photo by Jeffrey Grosscup



From its founding as the School of Business Administration in 1919 to its dedication in 1986 as the Curtis L. Carlson School of Management, the school has continued to provide the best in management education in Minnesota. Shown here are Eddy Hall, where the school was first housed, and Curtis L. Carlson at the October 8 dedication ceremony.

Tower and, with even further growth, expanded into part of the Humphrey Center building when it was completed in 1985.

The story behind the name

The school has had several names since its founding, each one reflecting new roles and emphases. It became the School of Business Administration in 1927, the Graduate School of Business Administration in 1961, the College of Business Administration in 1971, and the School of Management in 1981.

Then in 1985 Dean Preston Townley proposed enhancing the school's name through identification with an individual who embodies the school's values. The logical choice was Curtis L. Carlson, 1937 alumnus and successful entrepreneur. A first-generation Swedish-American, Carlson built a creative idea into a small business that has grown to a \$3 billion-a-year international conglomerate.

But even more importantly, Carlson has made a long, outstanding commitment to the university and the school through committee work and financial contributions. In April he kicked off a \$300 million fundraising effort by donating \$25 million to the university, earmarking \$18 million for the management school. Part of that money will fund three academic chairs, the first to be the Curtis L. Carlson Chair in Entrepreneurial Studies.

After extensive consideration of Carlson's many contributions, the Board of Regents officially approved the recommendation to change the school's name on October 8, 1986.

Looking to the future

The school continues to provide leaders trained in management to meet an increasingly complex, global business environment. Dean Townley describes the school's goal as, "to be a management school equal in quality to the excellent business community where we're located. We've built a good school, but we're striving to make it even better. Our aim is to be a business school that ranks among the nation's best in the calibre of research, teaching and responsiveness to society's needs."

More than 5,000 students in six degree programs

Providing the best in management education in Minnesota is a primary function of the Curtis L. Carlson School of Management. More than 5,000 students are enrolled in six different degree programs: Bachelor of Science in Business (B.S.B), with either a regular business or an accounting focus; Master of Business Administration (MBA), Business Taxation (MBT) or Industrial Relations (MAIR); and the Ph.D. in Business or Industrial Relations. Students may enroll in either evening or day classes, regular or accelerated programs.

The following table shows how many students have been enrolled in the school's degree programs in the last two years.

Number of students enrolled

Degree	1985-86	1986-87*
B.S.B.	1495	1440
MBA		
day	247	305
evening	1218	1256
manager's	42	56
MBT	150	150
MAIR		
day	98	99
evening	32	96
Ph.D.-business	136	130
Ph.D.-IR	15	20

*Figures for 1986-87 include estimated winter and spring enrollments.

In addition to the above enrollments, more than 500 business students registered through the Continuing Education and Extension division in both years.

Commitment to Focus

In response to university President Kenneth Keller's Commitment to Focus program, the school is reducing new undergraduate admissions for the regular business program by 25 percent over the next two years, beginning in fall 1986. Enrollments for stu-

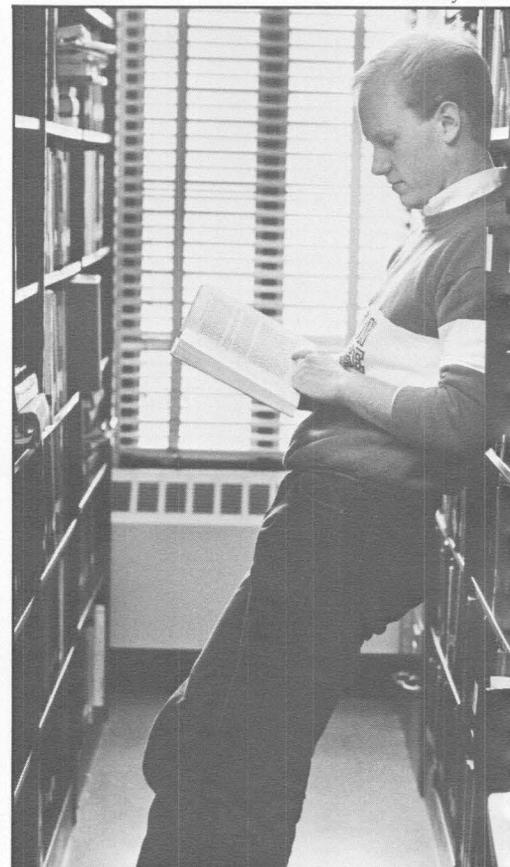
dents majoring in accounting will stay the same. The goal is to decrease the size of classes, increase faculty-student interaction and enhance the educational experience.

Although the school did achieve its target reduction of 17 percent new admissions for fall 1986, overall enrollments declined by only 2.2 percent from fall 1985. The major factors contributing to these continued high enrollments were an increase in the number of admitted students that matriculated and an increase in the number of students continuing from the previous spring.

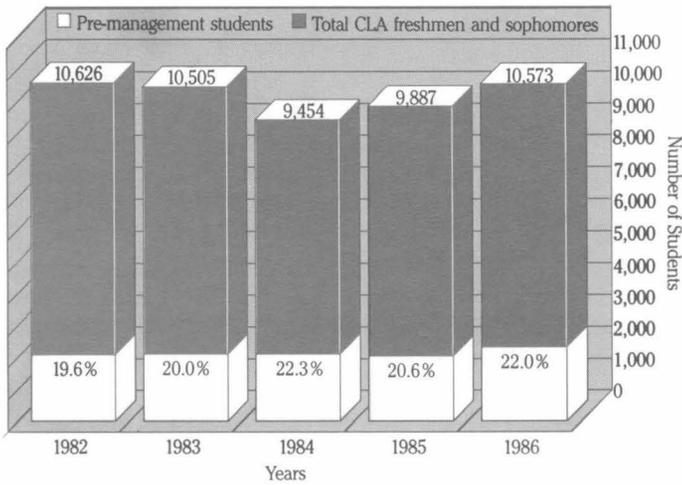
Pre-management profile

Most undergraduates enroll in the School of Management in their junior year, after taking basic required courses for two years in the College of Liberal Arts (CLA). As the following graph shows, the percent of CLA freshmen and sophomores who are pre-management majors has stayed about the same over the past five years.

Photo by Tom F

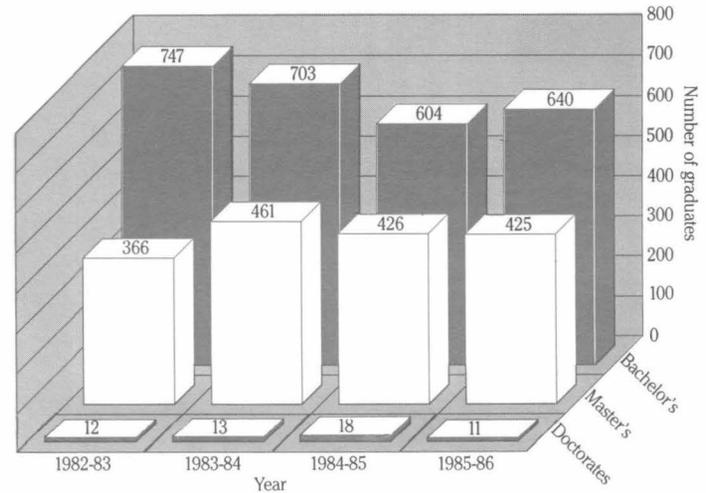


Percent of pre-management students in CLA
(figures shown are fall enrollments)



School of Management graduates

This graph shows the number of students who earned bachelor's, master's and doctorate degrees from the School of Management in the last four years.

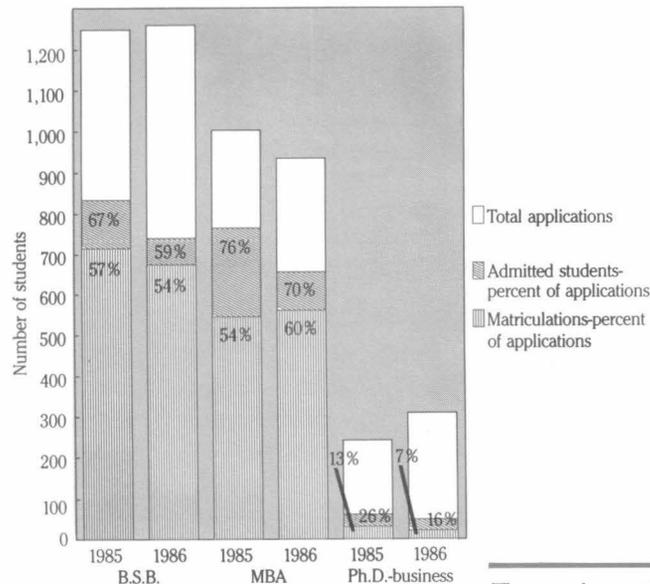


Comparison of applications, admissions and matriculations

One challenge facing the Carlson School of Management in striving to become one of the country's top five public business schools is to attract more high-ability students on all levels. One approach to this challenge is to increase the number of applicants, creating a larger pool of students from which to choose. The overall grade point average (GPA) of those students admitted would then likely be higher. Another important goal is to increase the percentage of students admitted who actually matriculate, or enroll in a degree program.

The graph compares the school's application, admissions and matriculation figures over the past two years for the three largest degree programs.

The average GPA and GMAT scores of admitted students increased on almost all levels this year over fall 1985, as the table shows. Undergraduate accounting students typically have higher GPAs than regular business majors and are listed separately here.



Average GPAs and GMATs of admitted students

Degree program	1985-86		1986-87	
	GPA	GMAT	GPA	GMAT
B.S.B.-regular	3.0	N/A	3.14	N/A
B.S.B.-accounting	3.2	N/A	3.22	N/A
MBA-day	3.26	570	3.28	570
MBA-evening	3.27	570	3.30	570
MAIR	3.25	540	3.31	540
Ph.D.-business	3.37	650	3.27	668
Ph.D.-IR	3.50	647	3.50	680

The graphs on this page and on page 19 were created with the assistance of Professor Tom Hoffman and Kristi Rolland, research assistant, using graphics software acquired in connection with the IBM Program in Support of MIS Education. The IBM grant totals \$2 million over five years, with an additional \$2 million in matching university and industry funds. IBM has also donated unlimited software to the program. Several research projects and new course developments have been funded under this program.

Helping graduates find professional employment is the job of the Placement Office

The Carlson School of Management's Career Planning and Placement Office assists students and alumni in planning their careers and locating jobs and serves as a liaison between students and employers.

The Placement Office helps students prepare for seeking employment in an increasingly competitive job market. This includes assistance with career planning and research, resume writing, interviewing techniques and job search strategies. The Placement Office library is available to students and contains information about careers, companies and contacts.

The office schedules campus interviews for students with visiting companies every year and posts job openings for full-time, part-time and summer jobs, as well as internships. The office also sends resumes of graduating students and alumni registered with the office to employers with job openings.

An overview of services and 1985-86 recruiting activity follows.

Recruiting activity in 1985-86

- 715 students were registered with the office
- 164 individual companies made 355 campus visits
- 4,857 interviews were held
- 567 offers were made
- 387 students were placed, 54 were not

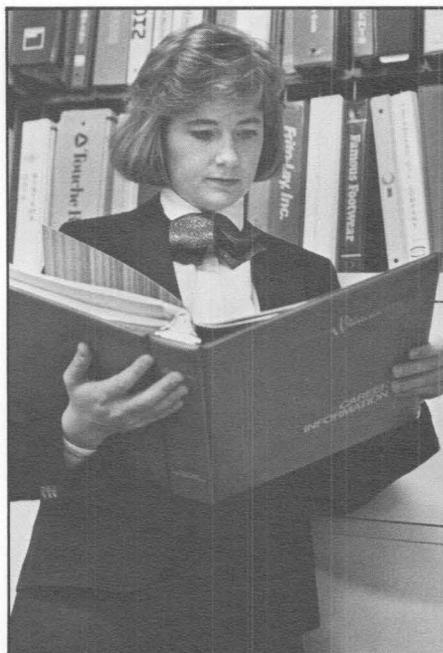


Photo by Tom Foley

Career information from companies throughout the U.S. is available in the Placement Office library, just one of the many services available to help students seeking professional employment.

- Of those actively looking, 126 did not respond to recent inquiry and 168 were still seeking employment
- Of those actively looking, 72% were placed by August 31

Placement Office services

Campus interviewing: The Placement Office schedules regular campus interviews from October through April, or at other times of the year if needed.

Job listings: The office maintains a listing of permanent, part-time and summer jobs. The job notices are posted and are also sent to alumni registered with the office. Interested applicants contact employers directly.

"New grad" and "available immediately" lists: The office maintains capsule resumes of students graduating each quarter and the prior year's graduates who are actively looking for jobs. Employers frequently use these to fill immediate openings.

Resume books: Each year in the fall the office distributes books containing resumes of all master's degree candidates and MBA intern candidates.

Resume referral: Resumes for master's, undergraduates and alumni are sent to employers upon request for openings in specific areas.

Internships: The Carlson School of Management offers four formal internship programs: an industrial accounting internship, a public accounting internship, an MBA internship and a Master's in Industrial Relations internship.

Alumni placement: Placement Office services are also available to alumni of the school, including scheduling interviews with visiting employers and resume referral.

Special events: Several of the school's organizations sponsor special events during the year that bring together students and employers. Regular events include an Accounting Career Fair in October, an Industrial Relations Center Annual Institute in the fall, an MBA Recruiter Reception in December, an Undergraduate Career Fair in January and a schoolwide Business Day in April.

For more information about Placement Office services, contact the office at (612) 624-0011. The office is located in 190 Hubert H. Humphrey Center and the director of Career Planning and Placement is Jan Windmeier.

1985-86 Salary Offers

MASTER'S DEGREES	No. Persons Receiving Offers	No. of Offers	Annual Range	Annual Average
MBA	95	145	\$16,800-47,496	\$30,624
MAIR	20	30	\$21,996-36,000	\$29,822

MBA salaries reflect a 6.6% increase over 1984-85.
MAIR salaries reflect a 5.6% increase over 1984-85.

BACHELOR'S DEGREES	No. Persons Receiving Offers	No. of Offers	Annual Range	Annual Average
BSB-Accounting (All Areas)	96	157	\$12,000-27,240	\$20,798
Public Accounting	56	95	\$16,992-24,000	\$20,632
Industrial Accounting	47	62	\$12,000-27,240	\$20,962
BSB-Regular	178	235	\$12,000-34,800	\$19,637

BSB-Accounting salaries reflect a 6.6% increase over 1984-85.
BSB-Regular salaries reflect a 5.5% increase over 1984-85.

Research Centers and Executive Education at the Carlson School of Management

Five research centers and an Executive Development Center have been established at the Carlson School of Management. These centers provide funding and other special resources for faculty research, fulfill special executive education needs and stimulate interaction between the business community and the school.

Each center maintains strong ties with practitioners and representatives from supporting companies, allowing for an exciting exchange of ideas and expertise.

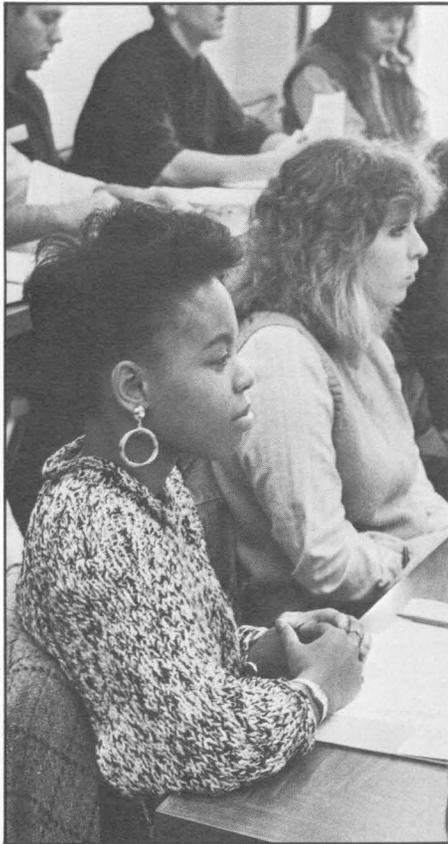


Photo by Tom Foley

Industrial Relations Center

Established in 1945, the Industrial Relations Center (IRC) investigates and explains behaviors of employees and employers and the problems they face. The teaching focus of the center is carried out through three graduate degree programs in Industrial Relations: day and evening master's programs and a Ph.D. program.

The center's research focus reflects the diverse background of faculty in economics, psychology, history, sociology and business administration. One of the center's strengths, that variety encourages the sharing of perspectives that lead to new ideas.

The breakup of AT&T created the kinds of problems the Industrial Relations Center was born to study. Faculty and graduate students investigated how Northwestern Bell, a newly independent operating company, should compare its pay roles to other

firms in the market. (For a report on this study, see the article on page 4 of the December *Minnesota Management Review*.)

Other IRC research interests include demographics and the labor force, pensions, fairness in hiring and selection, compensation practices, collective bargaining and international and comparative industrial relations.

IRC research activities include:

- Industrial relations workshops (15-20 each year).
- IRC Working Paper Series (20-25 papers each year).
- Policy Study and Development Service "Policy Studies Series."
- Faculty research findings, appearing in academic journals, the IRC Reprint Series and textbooks.



Photo by Nancy Johnson

Gathered in the Industrial Relations Reference Room are (standing) IRC members Ross Azevedo, associate professor; Dennis Ahlburg, associate professor; (seated) Donna D'Andrea, IRC administrator; John Fossum, associate professor and director of Graduate Studies; and Richard Arvey, professor and acting director of IRC.

Executive Education and Outreach

The IRC offers a variety of professional training programs to help people in management, labor and the public sector update or supplement their skills. While most of these programs are offered at university facilities, training services at company locations are also available.

The Labor Education Service (LES) provides educational opportunities to Minnesota workers and their organizations on topics such as collective bargaining, steward training, occupational safety and health, labor law, communication, labor and politics, labor history, parliamentary procedure and union administration. LES offers 34 courses in the Union Leadership Academy.

Established by the Minnesota Legislature in 1973 to balance IRC outreach programs, the Employer Education Service (EES) last year offered 95 seminars and conferences, attended by 2,450 people. These included

the popular Arbitration Conference and "Breakfast with the Expert" series. Professional certificate programs are available through EES in human resources, computer applications and supervision. More than 100 people are currently enrolled in certificate programs; 10 received certificates last year.

The Industrial Relations Reference Room contains a unique collection of resource materials on the employer/employee work situation, with special reference to collective bargaining and human resource management. The library is open to business, government and labor representatives, as well as university students and faculty.

For more information about the IRC, call the center at (612) 624-2500. The main office is located in 537 Management & Economics, and its director is Professor of Industrial Relations Mario F. Bognanno.



Photo by Tim Rummelhoff

Industrial Relations Center Director and Professor Mike Bognanno.

Accounting Research Center

The Accounting Research Center (ARC) was established in 1977 to provide resources for faculty and students in conducting accounting research and to establish scholarship and teaching programs.

The Minnesota Accounting Research Workshop presents a forum where innovative accounting research is presented and discussed. Here the faculty, doctoral students and distinguished visiting scholars

present unpublished research in various stages of completion. During 1985-86, 11 nationally acclaimed visiting scholars participated in the center's workshops.

The accounting faculty published articles in 21 scholarly journals last year and presented 26 papers at other universities.

A research project involving several faculty members developed microcomputer software as a teaching and research aid.

Executive Education and Outreach

The ARC and the Department of Accounting sponsor the **Minnesota Breakfast Forum Series**, presenting speakers who are actively involved with professional, public or academic issues in accounting. These forums, open to the public, provide an opportunity for interaction between members of the accounting community and academicians. They are a place to discuss concerns and current issues in accounting.

Former IRS Commissioner Roscoe Egger, Jr. spoke on tax reform at the fall 1986 Breakfast Forum. Another forum is scheduled for spring 1987.

For more information on the ARC, contact the center at (612) 624-6506. The center's main office is located in 645 Management & Economics and its director is David Dittman, chairman of the Department of Accounting.

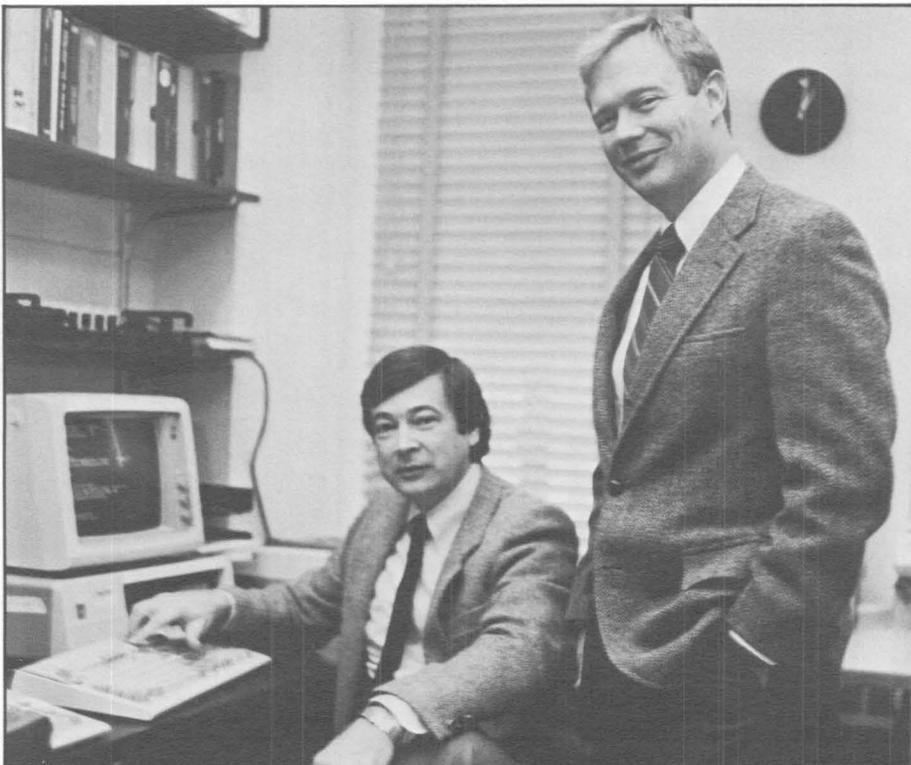


Photo by Nancy Johnson

Gordon Duke, associate professor of accounting, and David Dittman, chairman of the accounting department and the Accounting Research Center, in the accounting/MIS research lab.

Management Information Systems Research Center

Established in 1968, the Management Information Research Center (MISRC) conducts research on the managerial use of computers in organizations today. Composed of faculty and students from the Department of Management Sciences, the MISRC promotes a productive research relationship between the MIS practitioner and the academic community.

In 1985-86 faculty were involved in 17 research projects, including the Minnesota Managerial Graphics project and several subprojects funded by an IBM grant to the School of Management. MIS faculty published 40 articles and 2 new books, bringing the total number of books by faculty to 37. Twelve preliminary research papers, or working papers, were produced.

Current research topics include:

- MIS management and planning
- systems development
- computer graphics
- database
- end-user computing
- decision support systems
- MIS organizational and behavioral issues

MISRC has gained national leadership through its work with the Society for Information Management, the *MIS Quarterly*, the

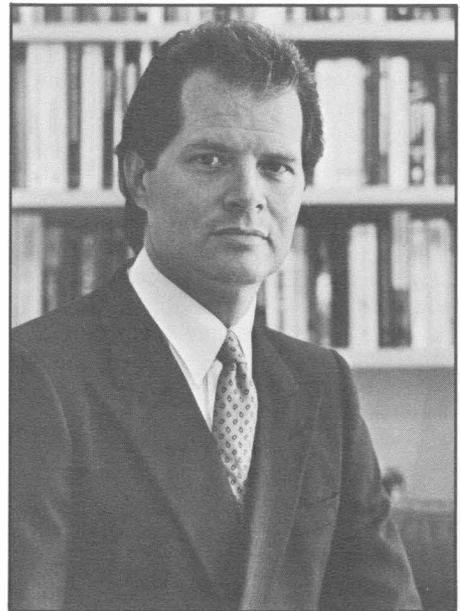
International Conference on Information Systems and the Association for Computing Machinery. The center has assumed editorial duties for the journal *Data Base*.

Executive Education and Outreach

MISRC sponsors a variety of activities that bring together MIS professionals and academicians, as well as enrich the education of MIS professionals. Last year 14 seminars and workshops were held and 10 discussion groups were formed. MISRC co-sponsored four national MIS programs with the school's Executive Development Center. The center also helps place students in MIS projects or internships at associate companies.

In December 1988 the center and the Department of Management Information Systems will host the International Conference on Information Systems.

For more information on MISRC, call the center at (612) 624-6565. The center's main office is in 355 Humphrey Building and its director is Professor of MIS James Wetherbe.



James Wetherbe, professor of management sciences and director of the MIS Research Center.

Operations Management Center

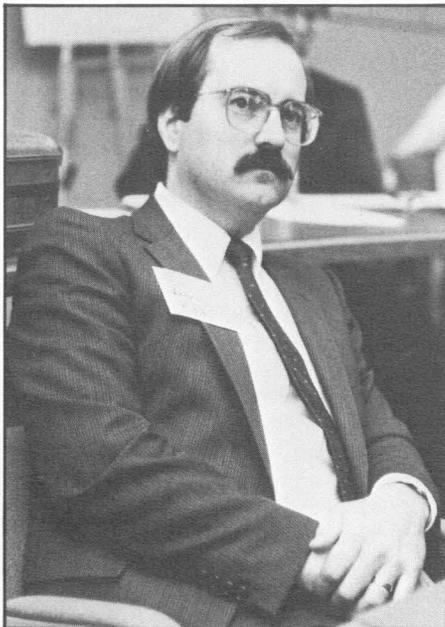


Photo by Nancy Johnson

Operations Management Center Director Gary Scudder, at a roundtable discussion on customer service sponsored by the center.

Established in 1983, the Operations Management Center (OMC) works closely with practicing operations managers to communicate state-of-the-art knowledge in the field.

OMC's annual research projects include:

- technological innovations in operations
- investigation of quality management practice
- principles for the management of successful operations
- system design strategies for high-contact services
- evaluation of current quality control practices

Projects funded for 1986-87 include:

- operations management—challenges for the 1990s and beyond
- leadership of organizational human resources
- buyer/vendor relationships with single sourcing

Executive Education and Outreach

Each year the OMC sponsors roundtables where the center's faculty meets with its company sponsors to discuss operations management challenges. Three roundtables, each one-half day in length, are scheduled in 1986-87. Featured faculty are:

- David Collier from the Ohio State University, speaking about customer service and quality levels in service organizations.
- Ken Roering, marketing professor at the Carlson School of Management, speaking about marketing/operations challenges.
- Chuck Manz, assistant professor of strategic management and organization, speaking about developing superleaders.

For more information about the OMC, call the center at (612) 624-3825. The office is located in 370 Humphrey Building and its director is Associate Professor of Management Sciences Gary Scudder.

Strategic Management Research Center

Founded in 1983, the Strategic Management Research Center (SMRC) studies strategic questions that cut across the functional and structural lines of an organization, questions faced by top and middle-level general managers in public and private, domestic and international organizations.

To adequately address these cross-disciplinary problems, the SMRC was established as an interdisciplinary center, receiving support and faculty involvement from the Carlson School of Management, the Hubert H. Humphrey Institute of Public Affairs and the Department of Agricultural and Applied Economics.

There are currently 55 researchers from 10 university units working on 29 research projects at the center. These projects all fall under one of the following research program areas:

- managing innovation and change
- international management research
- strategic planning and decision making
- small business development and management
- mergers, acquisitions and divestments

The center's research findings are available through the SMRC Discussion Paper Series, the Advanced Management Practices Paper Series and the Cases in Strategic Management Series. In 1985-86, 21 papers were published. Of the 58 total series papers presented since March 1984, 33 have already been published in leading scholarly journals and books.

Nationally prestigious awards were presented to four SMRC members recently.

Professor of Agricultural and Applied Economics Vernon Ruttan received the U.S. Department of Agriculture's highest award, the Distinguished Service Award. He was also elected a fellow of the American Association for the Advancement of Science and appointed a University of Minnesota Regents' Professor. Associate Professor of Strategic Management and Organization Ian Maitland and Professor Dong Soo Park (now at Yeungnam University, Korea) won an award for best paper of the year from the Social Issues in Management division of the National Academy of Management for their paper on corporate political strategy. Professor of Speech-Communications Scott Marshall Poole won the Speech Communications Association Golden Anniversary Monograph Award for the best paper in the field for 1986.

Executive Education and Outreach

The SMRC provides innovative outreach services to the management community. The Colloquium Series, designed as a forum for both managers and academics, addresses strategic management and organization issues. Speaking at colloquia in 1985-86 were internationally-recognized scholars from 11 universities and top executives from 5 corporations. Some of these speakers also led breakfast roundtable discussions with small groups of executives and faculty.

Two major conferences were conducted and co-sponsored by the center last year with equal participation by managers and



Photo by Nancy Johnson

Mary Lippitt Nichols, associate professor and director of the Strategic Management Research Center.

scholars, one on defining the scope of strategic agribusiness management and the other on the findings of the Minnesota Innovation Research Program. Recognizing the role played by language and communications in strategic management issues, the SMRC cosponsored the 1986 Minnesota Linguistics Conference. A major innovation conference is being planned for May 1987, with approximately 60 people invited.

For more information on SMRC, contact the center at (612) 624-0226. The center's main office is in 830 Management and Economics and its director is Associate Professor of Strategic Management Mary Lippitt Nichols. The center has two associate directors: Royce Hanson, associate dean of the Humphrey Institute of Public Affairs and Robert King, the E. Fred Koller Professor of Agricultural Management Information Systems in the Department of Agricultural and Applied Economics. Royce is acting associate director this year, in place of Associate Professor of Planning and Public Administration John Bryson, who is on leave.

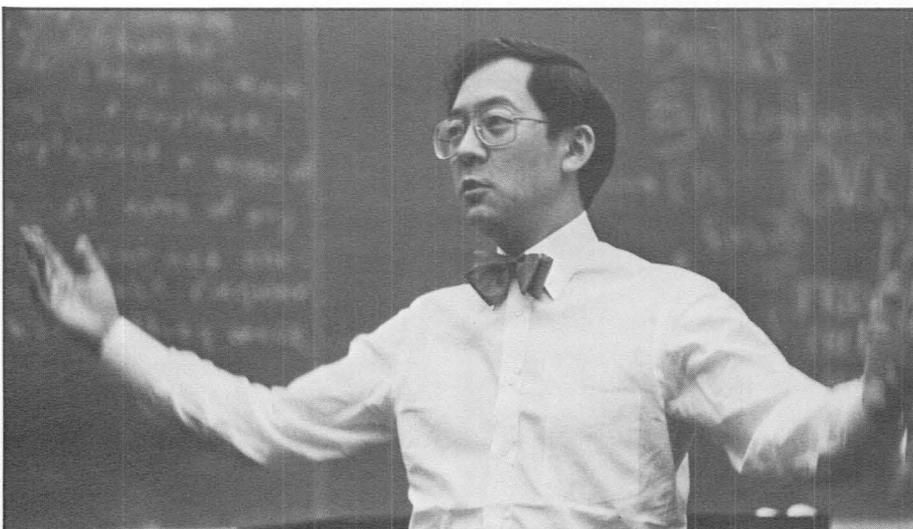


Photo by Tim Rummelhoff

William Ouchi, author of Theory Z, discussed his ideas at a presentation sponsored by the Strategic Management Research Center.

Executive Development Center

The Executive Development Center (EDC) designs and delivers continuing education programs for the practicing manager. Started in 1980, the EDC responds to the need currently employed managers have for specialized up-to-date information. Participants in the center's programs don't pursue a university degree. Rather, they meet specific developmental needs through intensive, short-term coursework, led by faculty and shared with people of similar backgrounds from other organizations.

The Executive Development Center offers three residential general management programs in formats compatible with a working manager's full schedule:

- The Minnesota Executive Program deals with strategic management for senior managers and covers issues concerning organizational mission and specific strategies required to achieve this mission. Michael Porter's recent book, *Competitive Strategy*, is typical of material used in the course.
- The Minnesota Management Institute deals with operating management for the mid-level manager and covers issues concerning the operating activities (operations, marketing, finance, human resources and systems) needed to convert a well-conceived strategy into a sound annual business plan. The *Harvard Business Review* article by Ted Levitt ("Production-Line Approach to Service") and the *Sloan Management Review* article by Henderson and Treacy ("Managing End-User Computing For Competitive Advantage") are typical of materials used in the course.
- The Minnesota Management Academy deals with "front line" management for the new manager, who is often a professional such as an accountant, systems analyst, engineer or compensation special-



ist assuming management responsibility for the first time in his or her area. The issues covered concern the basic activities of management, with special emphasis on the management of task teams. Program topics include communication, financial statements, management of change and personnel practices.

In 1985-86, EDC programs served over 250 managers from more than 170 organizations. The organizations represented include ADC Telecommunications, Artco, Bondhus, Cargill, Cuyana Engine Company, Donaldson Company, Gelco, Hormel, Johnson Controls, Jostens, Lampert Lumber, Lifetouch Studios, MTS Systems, 3M, Minnesota

Power and Light, Moorhead State University, Napco, Nash Finch, National Car, NSP, Northwestern Bell, Northwestern National Life, Onan, Pillsbury, Regis, Rosemount, St. Paul Companies and Valspar.

For more information about EDC, contact the center at (612) 624-2545. The office is located in 295 Humphrey Building and its director is William Scheurer.

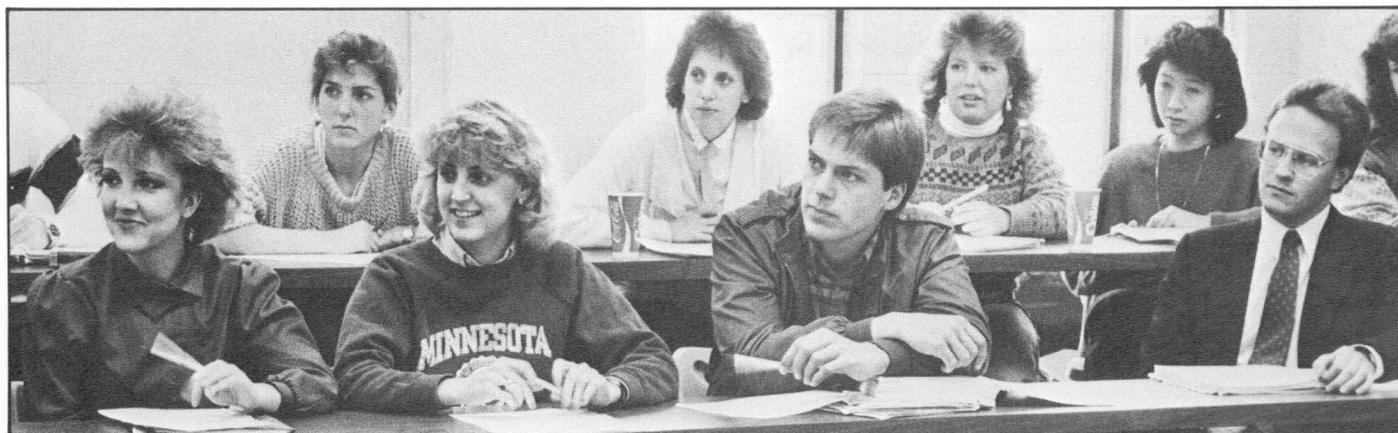


Photo by Tom Foley

The Alumni Advisory Council: a liaison to the school

By participating in key leadership activities, Carlson School of Management alumni play a crucial role in helping the school achieve its goals. This in turn benefits all alumni because as the quality of the school improves, so, too, do the value and prestige of its degrees.

Leading the school's 22,000 alumni and serving as a liaison between them and the school is the Alumni Advisory Council (AAC). Established in 1981, the AAC represents all Carlson School of Management alumni—undergraduate, graduate and Executive Development Center. Sixteen alumni volunteers serve on the council's board and work with seven volunteer committees to provide programs, information and other services to alumni and students.

Kay Barber, '75 MBA and AAC president, said she volunteers on the council in part out of "a sense of pride. I want to help make Minnesota a premier school of management. This is the AAC's overall goal, and it's right in line with [Kenneth H.] Keller's Commitment to Focus. I want to make it happen."

One way to make this happen, according to Kay, is by getting more alumni involved. "A big benefit of participation is the tremendous opportunity it gives you to network with other alumni," Kay pointed out. "It's good to have contacts outside your job. You get fresh ideas and a chance to learn leadership skills. This kind of interaction that comes from a strong alumni association is one reason Minnesota is a good place to go to business school."

AAC committees create opportunities for networking and idea sharing. The Alumni in Small Business and Alumni Programs committees sponsor social gatherings, programs and seminars. The Research com-



Photo by Jeffrey Grosscup

Curt Carlson accompanied 1986 Alumni Advisory Council President Kay Barber, '75 MBA (left) and 1985 AAC President Bette Abraham, '81 MBA, after the ceremony on October 8 officially naming the Curtis L. Carlson School of Management.

mittee works to identify alumni interests and needs and recruits alumni.

Three committees work on programs that enhance current students' educational experiences, another key AAC focus. The **Mentoring Program** committee establishes contacts between alumni and students who want additional help understanding the business environment. The **Alumni Participation in Recruiting** committee assists in recruiting high-ability students to the school. And, to help give students a better sense of belonging and commitment, the **Alumni Activities with Students** committee sponsors fall and spring receptions and assists in planning Business Day.

"Having alumni participate with students

really enriches their educational experience and makes it more personal," Kay believes. "Students get some contact with the business world and real-life business situations. The close proximity of so many alumni who are working professionals is an advantage of going to school in a big city. It makes Minnesota special."

One final committee, called the **Minnesota Campaign** committee, works in coordination with the dean's office and the overall university campaign on soliciting alumni support.

"The AAC's committee structure makes it possible for many alumni to volunteer, because you might have 10-15 people on one committee," Kay noted. "I'd like to see



Photo by Nancy Mellgren

Director of Alumni and Development Jeanne Katz outlined reunion activities to Bette Jean Latick Knudson, '46, and Charles Knudson, who now live in Lafayette, Calif.



Photo by Nancy Mellgren

Howard Torstveit, '47, and Jim Rose, '81, compare business school experiences at a 1986 reunion luncheon.

In recognition of our donors — a sincere thank-you

even more alumni getting involved this year on several different levels. Personally it's very satisfying and we have a lot of fun, too. It's going to be an exciting year."

For more information about alumni activities, call Kay Barber at (612) 330-8868 or Jeanne Katz, director of Alumni and Development at the School of Management, at (612) 625-1556.

1986-87 Alumni Advisory Council

Kay Barber, '75 MBA — chair
Bette Abraham, '81 MBA
Margaret Bloyer, '83 MBA
Tom Brakke, '83
Miles Davenport, '85 MBA
David Edstrom, '65 MBA
Susan Grafton, '81 MBA
Joel Erlandson, '75
Karen Hawley, '81 Ph.D.
Tom Maetzold, '51
Bill Poppert, '85 MBA
Sally Scheefe, '81 MBA
Paul Stormo, '71 MBA
Angela Vikesland, '81 MBA
B. Richard Vogen, '66
Paul Wilkus, '72

Minnesota Alumni Association affiliation

The Alumni Advisory Council is affiliated with the Minnesota Alumni Association (MAA), a universitywide dues-paying organization. Alumni can join MAA for an annual \$22 membership fee and receive the bimonthly *Minnesota* magazine, have access to university libraries, belong to a national network of alumni contacts and receive discounts at several university facilities and reduced rates to university and MAA travel programs.

Each member's graduating school receives a portion of that member's MAA fees. Along with this financial support, the AAC benefits from affiliation with the MAA because of its universitywide scope in encouraging and representing alumni views.

Harvey Mackay, the 1986-87 president of the Minnesota Alumni Association, who also serves on the Board of Overseers at the Carlson School of Management, feels that this "consciousness-raising" is a major contribution of the MAA. "The association is like a ship's rudder helping to steer a straight course," he said. "The MAA facilitates a flow of ideas at the university and often acts as a sounding board for university policy and programming. It's the collective voice of alumni."

For more information about the MAA, call or write: Minnesota Alumni Association, 100 Morrill Hall, 100 Church Street SE, Minneapolis, MN 55455, (612) 624-2323.

Alumni and friends of the Curtis L. Carlson School of Management gave \$205,118 last year to support business education at the University of Minnesota, an increase of \$24,901 over the previous year. Matching gifts increased by 27 percent in the same period, from \$43,377 to \$57,924.

Most of the school's financial contributions come through the annual giving program conducted by the University of Minnesota Foundation. Student callers contact university alumni, update them on what's happening at their school and ask for their annual support. This telephone solicitation has grown from \$74,328 in 1985 to \$87,547 in 1986.

Donor gift clubs at the Carlson School of Management and the university recognize individual efforts in supporting excellence in education. At the school, the **Century Council** recognizes gifts of \$100-\$499, the **Dean's Council** recognizes gifts of \$500-\$999 and the **Benefactor's Council** acknowledges gifts over \$1,000.

The school and the university recognize three additional levels of giving. **The President's Club** includes individuals who give \$10,000, contributed at a minimum level of \$1,000 annually for ten years or planned gifts of \$25,000 or more. **The Trustee Society** is open to individuals, foundations and other groups who give a minimum of \$100,000 or a planned gift of \$150,000.

Builders for the Future is open to individuals, foundations and other groups contributing \$1 million or more.

The Carlson School of Management would like to acknowledge the alumni and friends who made contributions in 1985-1986, listed on the next pages, and extend to them a sincere thank-you. It is gifts like these that help make the difference in the quality of education the school can provide.

Benefactor's Council (1000 +)

Edward W. Asplin *
Lee Bearmon
Duane L. Burnham
Curtis L. Carlson
Jack A. Cipra
William S. Cook *
Elliott S. Dubinsky
George J. Frey
Theodore E. Hanson
Vernon H. Heath *
Marion K. Hvoslef *
Stephen F. Keating *
Robert J. Knoll *
Duane R. Kullberg *
Thomas P. Lowe
Harvey B. Mackay *
Allan L. McKay
Carlyle G. Pohlman
George Russell *
Terry L. Tranter

Dean's Council (\$500 - \$999)

John S. Allen, Jr.
Anthony L. Andersen
Hector R. Anton
Duane C. Bojack
Thomas M. Dale, Jr.
David R. Fesler *
Glen F. Fuerstneau
Stanley M. Goldberg *
Melvin M. Goldfein
Jack C. Gray
George M. Hedla
David C. Johnston
Earl R. Klein, Jr.

* Member of the University of Minnesota's President's Club.

Gary N. McKinley
James R. Miller
Roger H. Nord
Orem O. Robbins
Erick O. Schonstedt
Mark A. Sellner
Robert John Solheim
Elizabeth S. Sperling
Thomas H. Swain *
E. Palmer Tang
John E. Thomas
Darryl L. Thorvilson
Richard H. Tschudy

Century Council (\$100 - \$499)

Roy E. Abbott
David H. Abramson
John B. Ahlquist
Clifford E. Alexander
Douglas A. Alger
Kenneth J. Andersen
Donald M. Anderson
Gerald E. Anderson
James E. Annett
Craig C. Avery
Maynard J. Axtell
Andrew D. Bailey, Jr.
Joseph H. Baker
Robert A. Baker
Ronald D. Baker
Richard G. Ballintine
James H. Barickman
Ned M. Barnes
Frederick W. Bassinger
Gary A. Bauer
Richard P. Baughman
Robert B. Baumgartner
David W. Beckley
Michael W. Beddor

David C. Beert
Frederick J. Beier
John R. Belfry
Randall F. Bellows
Jayne E. Benish
James C. Benson
D. J. Berkley
R. Glen Berryman
John F. Bierbaum
Robert M. Bigwood
Brent G. Blackey
Bernard B. Blakey
Kenneth L. Block
Harold J. Bloom
John E. Bohan
J. Ralph A. Boline
Daniel P. Bork
Arthur J. Bourgeois
Daniel W. Brady
Thomas E. Brady
Edward G. Brandt
James R. Brandt
Leo Breitman
Leonard E. Brown
Robert E. Buuck
James E. Bye
Robert C. Calander
James R. Campbell
L. H. Carlson
Jay P. Carstenbrock
Robert C. Christenson
Myron M. Christy
William E. Costello
Dwight J. Cox
John R. Cox
Joan L. Crewson
Edward M. Currie
Stephen H. Cushing
Andrew P. Czajkowski
Gerald J. Daleiden

Lynn Joseph Davis
James P. Defoe
Barbara M. De Laittre
David W. Deming
James E. Devitt
Robert B. Diercks
Erling Dokken
Daniel H. Dorn
Jeffrey R. Doshan
Thomas A. Dougherty
Alice B. Drum
Nymar K. Dunbar
John M. Durham
Sheldon V. Durtsche
Carl T. Edler
Miles E. Efron
Frank R. Eggers, Jr.
David S. Eiger
John P. Ekstrand
John B. Ellsworth
Harvard D. Elverum
Bjarne R. Eng
Alfred G. Engdahl
Chester E. Engstrom
Gregg E. Erickson
David E. Erickson
Shiela E. Erickson
Russell H. Ewert
Robert Ezrilov
Keith C. Field
Edwin W. Fierke, Jr.
James N. Fischer
Marilyn L. Fleury
Diane Linda Flottesmesch
Harold J. Fostmeier
Harriet L. Fritz
Victor Fruehauf
Vernon D. Gallagher, Jr.
Marion W. George
Harold D. Gillman
Kenneth C. Glaser
Rolland E. Glesing
Stephen K. Goldstone
T. Allen Granfield
Frederick H. Gravelle
Duane Dale Gravley
Lawrence G. Greenberg
Willard A. Greenleaf
James H. Grenell
Morris P. Grossman
Victor A. Gruman
Maynard P. Guenther
Howard M. Guthmann
Daniel O. Hagen
Jay R. Hamann
Donald O. Hambleton
Harry A. Hammerly
Mark A. Hamre
Kenneth W. Hansen
Stanley E. Hansen
Roger D. Haro
Sigmund M. Harris
Raymond E. Hartz
Steven W. Haugen
Karen E. Hawley
Russell B. Heise
William Hemmersbaugh
Alan D. Henderson
James M. Hennessey
Mervin D. Hennings
Joseph J. Hermanson
Wallace F. Hilke
Richard B. Hill
Larry J. Hinman
Bryan L. Hodges
Clifford W. Hoffman
John M. Hogseth
Marlys M. Holmstadt
Stephen R. Holstad
David N. Holtze
Daniel D. Hoolihan
Patrick A. Hopf
Mary E. Horsch
Michael C. House

Robert V. Hovelson
William R. Howard
Kenneth D. Howatt
Robert A. Howe
Mark J. Hudson
Mark A. Hughes
William J. Hunt
Chester L. Hursh
Theodore A. Jacob
Robert Jaedicke
Mary J. Jaracz
Howard G. Jensen
Dean A. Jenson
F. Craig Jilk
D. Ward Johnson, Jr.
Dwaine C. Johnson
Janet B. Johnson
Rollin P. Johnson, Jr.
James T. Kane
Oiva J. Kari
Robert N. Katz
Hal G. Kelley
Esther M. Kellogg
Martin N. Kellogg
Richard E. Kenny
Phillip J. Kerich
A. R. Kircher
Douglas W. Kirk
Victor W. Kirsch
James E. Klapmeier
William K. Klein
Richard A. Kligen
Richard Klune
Darrell G. Knudson
Raymond J. Kosak
Alan M. Kotula
Leslie F. Kotval
Brian D. Kovalchuk
Vernon K. Kowalsky
Richard J. Kruger
Robert A. Krysa
Steven W. Laible
Grant P. Lampson
Neil N. Lapidus
Kenneth L. Larson
Paul R. Larson
Rholan E. Larson
Russel E. Larson
Thomas E. Leary
Charles L. Leavitt III
Robert D. Lee
Laurie L. Lehtin
Chad D. Lemmons
Paul A. Lipetzky
Fred L. Lockwood
C. W. Loufek, Jr.
Valard A. Lufi
Edward C. Lund
Timothy P. Lundberg
Terese M. Lynch
Hugh G. Madson
C. Marvin Mandery
J. D. Marcus
Robert J. Marzec
Randall B. Mattson
Norman H. McMillan
Miles W. McNally
Dorothy J. Meacham
Thomas M. Medwig
Robert L. Melamed
Robert A. Mellin
S. C. Mellin
Charles J. Mencil
Charles H. Meyer
Roger F. Meyer
Catherine E. Miller
Craig R. Miller
F. Carl Miller, Jr.
James R. Mitchell
David Moxley
John F. Mullen
Al H. Nathe
Dennis G. Nelson
John V. Nelson

Ward R. Nelson
Elmo V. Ness
Bruce G. Nimmer
Lane C. Nordquist
Curtiss R. Oberg
Nancy S. Olsen
Clifford L. Olson
Valdemar Olson
Arnold P. Orloff
Paul M. Osman
Richard K. Ottem
Duane L. Ottenstroer
Gregory P. Ovik
Murray R. Owens, Jr.
Paul W. Parker
Jerry J. Perpich
Richard A. Perrine
Curtis E. Petersen
Norman H. Petersen
Susan Petersen
Dwight A. Peterson
Edward D. Pierson
Sheldon L. Pinck
Philip L. Pitsch
Gregory M. Pizzano
Richard K. Pogin
Leo S. Pontius
Colleen Q. Porter
Thomas A. Porter
Robert D. Potts
John C. Powell
Dennis R. Prokop
Kenneth E. Puffer
Charles F. Pursley
William C. Rachie
Ronald Radakovich
Scott W. Rahn
Rodney S. Rasmusson
Michael Reich
Donald C. Reiox
Gregory C. Reynolds
Bruce A. Richard
Norman F. Rickeman
Douglas L. Ritter
Paul A. Roberts
George M. Robertson
James E. Robison
Charles E. Roemer
Patrick W. Rogers
Calvin O. Roloff
Teresa J. Rothausen Williams
M. Salloway
Michael V. Sames
David B. Sarver
William J. Saul
Jon D. Saunders
Chester R. Szanski
David L. Schafer
Sally A. Scheefe
Douglas J. Schmalz
Donald L. Schwartz
Howard W. Schwartz
Robert P. Scobie
Robert C. Scott
Saul W. Segal
Carol J. Segersin
Charles H. Self III
William Kwai T. Seng
Donald A. Severson
William H. Severson
Roger H. Sherman
Thomas A. Sherman
George M. Shortley
William W. Siphkins
Stanley M. Sjosten
Richard F. Slabey
L. Douglas Smith
William K. Smith
James W. Sowles
Robert T. Sprouse
Curtis G. Stangler
James R. Stark
Ralph B. Stevens
Robert E. Stevenson

Lawrence E. Stirtz
V. G. Stoia
Thomas M. Stoltman
Theodore L. Stromberg
Karen A. Struve
Lee Sudit
Bonnie D. Sullivan
Robert J. Sutter
Arthur L. Swanson
Robert L. Swedien
Richard S. Taylor
Stephen M. Taylor
William C. Tedlund
Bruce N. Telander
Thomas A. Tessman
David M. Thompson
Mark A. Thompson
Bruce A. Thomson
Lowell A. Thornber
Richard D. Thorsen
Paul T. Timpane
Wade F. Tobin
Curtis L. Tollefrud
James A. Trenda
Richard B. Troxel
John E. Truckenbrod
Albert N. Turenne
Kim W. Ufford
Angela O. Vikesland
Joseph P. Vogel
Paul E. Vogelsang
Gary J. Volkenant
Ralph J. Voss
Kenneth R. Wahlberg
Thomas B. Wall
Harold W. Walter
Richard D. Webb
Richard W. Weigel
Joseph O. Weissborn
James E. Weldy
John T. Wheeler
Jean Y. White
Rolland H. White
Rob Wight
Thomas J. Wilford
C. Arthur Williams, Jr.
Bruce L. Wilson
John R. Winsor
Patrick W. Winter
Robert J. Winter
Warren T. Witt, Jr.
Vernon H. Wolff
Maynard E. Wood
Roger W. Woodruff
Bayard E. Wynne
Claude J. Zagaria
Fredrick D. Zahn
Steven R. Zenz
Willis A. Zignego
Michael J. Zwolski

All other donors
Ingvar B. Aaseng
Paul M. Abbott
John P. Abrahamson
Ronald G. Abrahamson
Hal S. Abrams
Richard B. Abrams
Dorothy L. Abts
Thomas L. Ackerson
Dennis D. Adams
William F. Adams
Steven P. Addington
Jack F. Adler
Helen M. Agnes
Garrick D. Agnew
David M. Ahlers
Yuki Akaki
James A. Albertson
Gregory P. Albrecht
Jeffrey S. Alch
Gordon L. Alexander, Jr.
Karyn L. Alexander

Dennis L. Alfton
Arnold J. Alger
Durwood Alkire
Carl P. Allen
David J. Allen
Glenn L. Allen, Jr.
Janet L. Allen
Lowell S. Allen
Mark R. Allen
Thomas H. Allen
James S. Allison
John W. Allison
Robert M. Allison
Mark V. Allred
Gary V. Alm
Paul E. Almquist
Laurence J. Altman
Gordon C. Amoth
David M. Amundson
Gunnar T. Andersen
Amy A. Anderson
Arvid W. Anderson, Jr.
Brian L. Anderson
Christine N. M. Anderson
Clark B. Anderson
Clayton M. Anderson
Clifford I. Anderson
Cornell J. Anderson
Craig A. Anderson
Cynthia L. Anderson
Frederick A. Anderson
Gary W. Anderson
J. Raymond Anderson
Jacqueline B. Anderson
James E. Anderson
Louis L. Anderson
Mary E. Anderson
Monte G. Anderson
Rolf F. Anderson
Roy E. Anderson
Scott P. Anderson
Sharon L. Anderson
Thomas J. Anderson
Willie L. Anderson
John D. Andrews
Roger L. Andrews
James J. Andrist
Elizabeth A. Anfinson
Daniel G. Winter
Michael W. Arend
Jon M. Armstrong
Robert W. Arndt
Allan H. Arneson
Thomas N. Arnfelt
William T. Arnold
Bradford A. Arthur
James E. Asebnrenner
John W. Askew, Jr.
John A. Atkins
Peter A. Atwood
Roger E. Atwood
David A. Aune
Ivar H. Awes
Todd A. Awes
J. David Aylmer
William R. Ayshford
Ronald J. Bach
Lee W. Bachman
Debra A. Bachtold
Joseph M. Backes
Roger E. Baertsch
Gerald L. Bailey
James H. Bailey
Lawrence C. Baker
Mark R. Baker
Mark T. Bakko
Virginia F. Balster
Kenneth G. Baltes
Stanford M. Baratz
Ronald V. Bardal
Blaine G. Barkley
Gregory S. Barlow
Bradley J. Baron
Jerome T. Barrett
Mary P. Barrett

Thomas D. Barta
Le Roy H. Bartels
Janet K. Bartel
John T. Barthel
Michael E. Bartholomew
Errol W. Bartine
Robert W. Bartling
Jeffrey T. Basche
Dennis J. Bastyr
Levan R. Batcheller
William K. Batchner
Victor R. Bates
Donald G. Bauer
Glenn L. Bauer
James W. Baumgartner
David J. Baune
William H. Baxter
Harold H. Beach
Nancy A. Beadling
Janet S. Bearmon
Marcel G. Beaubien
Gerald J. Beck
James W. Beck
Donald E. Becker
Donald E. Becker
James A. Becker
Robert E. Becker
David A. Beecher
Martin Beer
James D. Begin
Richard L. Begin
Lloyd W. Behler
John C. Bekavac
Karen Belden Frey
Richard H. Belisle
Arthur C. Bell, Jr.
Robert W. Beltz, Jr.
Paul R. Beltz
Daniel L. Ben-asher
Gerald L. Bendickson
Clifford H. Bennett
Edward N. Bennett
Rae M. Bennett
Jane A. Benson
Kendall L. Benson
Marvin C. Benson
Eugene D. Benting
David J. Berg
Douglas M. Berg
Mark N. Berg
Milo D. Berg, Jr.
Sture L. Berg
Sheila D. Berger
Donald A. Berglund
Thomas J. Bergmann
Carl R. Bergquist
David R. Bergren
Jerry D. Bergseth
John C. Bergstrom
Frank R. Berman
Harry Bernat
Michael A. Bernatz
Dale F. Berndt
Alan E. Bernick
Anne M. Bernstein
Steven M. Bernstein
Linda R. Bertson
Mark C. Bertson
Bonnie J. Berquam
John H. Berryhill
James A. Bertelsen
Wilfred N. Berthiaume
W. John Beske
Woodrow W. Beske
Bruce E. Betcher
Linda K. Bethke
Jane E. Bienapfl
Ardath H. Bierlein
Lynne A. Billingsley
Robert J. Birk
Bruce K. Birnberg
Michael J. Bishop
John F. Bjorklund
James F. Blanchard

Allan J. Block
Robert A. Blomberg
Peter J. Blomquist
Steven M. Blonigan
Terry J. Blount
Norma Bodey
Roger H. Boelter
Thomas M. Boesen
Gregory W. Boettner
James R. Bogard
John A. Bogard
Mario F. Bognanno
Gary A. Bohline
Barbara E. Bollum
Chester D. Boike
Jonathan B. Bolen
Genevieve G. Bolger
Robert T. Bollweg
Kim C. Bonander
Alson L. Bondy
William C. Bonetti
Ronald A. Bongard
Stuart J. Bonniwell
Linda G. Borchardt
Robert E. Borth
Ross N. Boreson
James S. Borland, Jr.
Patrick P. Born
Reed A. Bornholdt
Robert A. Borowski
Daniel S. Boss
Garrett W. Boss
Cynthia L. Bottrell
Emil J. Bovich
Dene R. Boyd
Thomas J. Boyer
Fosten A. Boyle
William R. Boyles
Todd W. Boynton
Patrick J. Bradley
R. H. Bradley
Floyd W. Brady
Earl N. Braine
Thomas J. Brakke
Richard A. Brammer
Jay B. Brandt
Carl R. Branger
Robert S. Branson
Margery L. Brant
Alan S. Bratten
Robert W. Braun
Randal A. Bray
Julie C. Bredahl
John C. Breen
Thomas J. Bregmann
Ruth M. Breneman
Paul D. Brey
Susan Brickley
Bruce C. Briese
Gary E. Brinkman
Gary P. Brintnall
Cecil Britton
Thomas C. Britton
Robert R. Broberg
Susan K. Brocious
Amy L. Brockhaus
Scott D. Bronson
Gerald W. Brower
Bruce A. Brown
David J. Brown
David W. Brown
Donald J. Brown
John E. Brown
Michael C. Brown
Richard G. Brown
Robert J. Brown
Ted G. Brown
William C. Brown
William R. Brown
Daniel L. Browning
Richard D. Brownlee
Nancy A. Broz
Stephen T. Broz
Albert S. Brubaker

Fred L. Brucciani
Roger S. Brude
Bennett G. Brudevold
Susan M. Bruley
Irving V. Bruns
Sandra J. Buettner
Dennis W. Buhl
Daniel J. Buivid
John H. Bullion
David M. Bungert
Douglas M. Burckhardt
James J. Burelbach
John H. Burg
William H. Burgess
David A. Burkholder
Alden E. Burkstrand
Kerry W. Burnham
Michael M. Burns
Richard J. Burrock
Fred Burstein
Melvin L. Burstein
David R. Busch
Robert Buscher
Lynne F. Bushlack
Robert D. Buth
Thomas L. Butler
Max A. Butterfield
Gary A. Byce
Richard J. Bydlon
David R. Bye
Jean M. Byrne
John E. Byrne, Jr.
Vincent L. Cahill
Larry Paul Caine
Paul J. Cairns
Harold D. Caldwell
William J. Calguire
Clifford W. Call
James H. Callan
Karl L. Cambronne
Jon R. Campbell
Robert B. Campbell
Robert R. Campbell
R. J. Candee
Mark S. Cane
Tom R. Carbonneau
John S. Cardarelle
Ann E. Carey
David Carlsen
Duane S. Carlson
E. A. Carlson
Edna I. Carlson
John W. Carlson
Joyce K. Carlson
M. Edward Carlson
Raymond W. Carlson
Roger B. Carlson
Scott W. Carlson
Stanley M. Carlson
Robert C. Carmichael
John E. Carpenter
Walter S. Carpenter
David G. Carroll
James A. Carroll
John L. Carroll
P. Donald Carson, Jr.
Gerald T. Casey
Jerome M. Casey
Christine Casper
Paula R. Cayemberg
John J. Chai
Roger W. Challman
Carl R. Chalupsky
Allan R. Chambard
Martin E. Chamberlain
William R. Chamberlain
Margaret K. Champley
Shirley S. Chan
Howard J. Chanen
Ida Lano
Warren B. Chapin IV
Darrell J. Charboneau
Rudolph J. Charney
Maylene D. Chaska

Howard B. Chatfield
Joyce T. Chen
Yunghua T. Chen
David Ira Chesler
Cheryl L. Christensen
G. L. Christensen
R. A. Christenson
Eric P. Christiansen
Larry N. Christiansen
Dennis I. Christianson
Harold V. Christianson
Robert T. Christianson
Roger A. Christianson
Warren G. Christianson
Ronald C. Christner
Douglas C. Christoffersen
John Chrun
Arnold T. Chu
David B. Clemans
Thomas E. Clemens
Wayne B. Clementson
Melvin F. Clemons
Prof Grover A. Cleveland
Ricky D. Clevette
Donald L. Clifford
Jon M. Clumpner
David H. Cochran
James L. Cohen
Perry M. Cohler
Stanley L. Cohn
Kathy I. Colebank
William C. Collett
David N. Collins
Roger A. Collins
Robert J. Commers
Harriet W. Conkey
Bonnie Jo Conklin-Mayer
Donald J. Conlin
Richard W. Connelly
Richard Conner
Paul A. Connolly
Raymond A. Conover
James A. Conto
Michael T. Conway
Charles M. Cook
James D. Cook, Jr.
Blaine Cooke
Morris J. Cooke
Katherine E. Coolidge
Cheryl R. Cooper
William George Cornelius
James F. Corrigan
Lynn R. Corson
John B. Costello
Dorothy C. Cottrell
Ellen C. Coughlan
Joan M. Cradle
Bradley A. Craig
Ronald E. Craig
Robert J. Craik
Catherine A. Crelly
Darol L. Cridlebaugh
Charles M. Crimmins
Scott L. Crisman
Robert R. Croft
Eugene M. Cross
Merlin W. Cross
John M. Crow
Jennifer L. Crowe-Innes
Maurice M. Crowley
Norajean Crowley
Patrick J. Crowley
Donald J. Cullen
James H. Curnow, Jr.
Robert J. Currier
Rita C. Curtin
Claude E. Cybulski
William C. Dacus
Jerome L. Dahlquist
Rebecca A. Dahlstrom
Dennis L. Dahm
Richard F. Dahnert
Archie T. Dalbotten
Julie F. Dallas

Thomas P. Danielson
Eugene E. Dario, Jr.
Jon B. Darling
Robert E. Darwin
Eugene S. Daszko
Donald M. Davies
Marion L. Dawson
Alphamae C. Day
John J. Day
Joy M. Day
Kay E. De Caster
Gerald G. Dederick
Michelle A. Dedolph
John R. Dee
Brenda J. De Geer
Michael J. Degen
Bruce H. Deger
Bruce D. De Jager
Harold R. De Jager
Douglas Delahunt
James R. De La Hunt
Gerald W. Delaney
Curtis A. Delegard
Ida M. Demario
Derrell E. Deming
Thomas M. De Neu
Warren W. Dennis
Sheila M. Denny-Andrews
Anne E. Derfler
Joseph H. Dervie
Dilip M. Desai
Ronald J. Desellier
Robert J. De Valk
Robert Devaney
Thomas R. Devine
Rienk R. Devries
Nancy L. De Witt
Gregory P. De Ziel
Stephen M. Dick
Van U. Dierauer
Arthur O. Dietrich
James F. Dimarco
Priscilla R. Dixon
Ronald L. Dobyns
John M. Dockerty
Paul J. Dockry
Norman J. Dodd
Dennis M. Doherty
Steven W. Doherty
Joseph B. Dohn
William M. Dolan, Jr.
Richard E. Dolby
H. Alvin Domholdt
Bradford J. Dominic
David J. Donaldson
Frank A. Donaldson III
Linda L. Donaldson
Paul G. Donlin
Gerald C. Doran
Henry A. Dorff, Jr.
Mary K. Dotson
Dennis R. Dougherty
Harold Dower, Jr.
Amy F. Doyle
John H. Doyle
Richard W. Draeger
Kathleen A. Drannen
John S. Drasin
Dean E. Draxton
C. J. Drazek
Dean M. Dressel
James M. Dropp
Justin M. Druck
William C. Dubats
Donald W. Dubay
Richard M. Du Bois
Bradley L. Duesterhoef
Janet M. Dukerich
Kelly R. Dunn
Kevin R. Dunn
Marvin D. Dunnette
Sharon A. Durheim
Mary H. Duthler
B. M. Dvorak

James B. Dworkin
G. Clarke Eaton
Dennis F. Eckman
Steven M. Edgett
Richard E. Edin
Harry W. Edwards
Richard L. Edwards
Barry H. Effress
M. Rodney Effress
Laura L. Eggert
Richard T. Ehrick
Sharon K. Eicher
Barbara E. Eitel
Stanley J. Ekegren
Alan R. Eklund
David L. Elert
Barry L. Elfstrom
Elizabeth A. Elicerio
Leo J. Elm III
Charles H. Elmer
Glenn M. Elo
Dan H. Elron
Richard S. Elster
Richard E. Embertson
Rosealee C. Emerick
W. Keith Engel
Stephen A. Engelke
Gene R. Engelson
Calvin J. Engelstad
Jon B. Engfer
Barbara A. Enhelder
Betty A. Enkhaus
William K. Ergen
Angela M. J. Erickson
Curt E. Erickson
Curtis R. Erickson
Debra K. Erickson
Grant D. Erickson
Gregory K. Erickson
Perry C. Erickson
Philip L. Erickson
Sidney M. Erickson
Steven L. Erickson
Walter W. Erickson
Jeffery C. Erickson
Kenneth T. Erpelding
James M. Ersfeld
Elliot B. Eskin
Arthur M. Espeland
David L. Estenson
Terrence A. Ethen
Donald E. Etnier
Joseph W. Ettel
Victor M. Evans
Edmund A. Everts
David J. Ewens
Roger N. Eye
Richard J. Fadgen
Raymond H. Fadner
Michael I. Fahey
Donald M. Fahrenkamp
Richard L. Failor
Matthew M. Fajack
Steven A. Falk
Phillip M. Fantle
Mary M. Farley
Bradley P. Farness
John R. Farr
Richard W. Farrell
Ronald H. Farrow
Gordon C. Fay
Michael E. Fehrman
Harley D. Feldman
Gerry L. Fellman
Jeno S. Fenczik
Bruce H. Fenske
David R. Fickes
Ronald Fingerhut
Barbara A. Fingleton
Jeffrey O. Fink
Eugene B. Finkenauer
Patrick M. Finley
William J. Finley
Albert C. Fischer

James D. Fisher
Everett V. Fisk
Michael B. Fiterman
Richard D. Fitts
Margaret Fitzpatrick
John J. Flagler
Martin P. Flaherty
Kenneth R. Flannery
Alfred C. Fleckenstein
Robert W. Fleming
William F. Fleming
Mary J. Flinn
John H. Flittie
Joseph M. Floeder
Harvey Z. Flom
Todd S. Florell
David E. Flores
Robert J. Folkes
Elwyn J. Fonk
Theresa I. Forman
Richard A. Forslund
Carl E. Forsyth
Mary K. Foss
Kyle K. Fossum
Richard A. Fossum
Michael R. Foster
Jeffrey P. Fox
Byron L. Frank
David J. Frankenberger
Gregory G. Frankenfield
Paul O. Frederickson
Marvin P. Fredgant
Alden G. Fredin
Larry E. Fredrickson
Gene H. Freed
Bruce L. Freidson
Daniel E. Freier
Michael J. Frey
Rosanne M. Frigo
Fred R. Friswold
James M. Froisland
Leon J. Frost
Diane C. Fuhs
Roger M. Fundingsland
Russel L. Funk
Newell O. Gaasedelen
Thomas M. Gabrik
Cindy A. Gagne
Michael J. Galassi
Linda G. Gallick
John M. Gallup
Paul Gam
Jay A. Gans
Rudolph Garfin
Richard D. Garland
Robert F. Garland
Barbara L. Garlough
William G. Garrison
Dara E. Gault
Patricia L. Gaustad
Jeffrey L. Gauvin
John G. Gaylord
Richard M. Geddes
Harley D. Gee
Alvin E. Geerdes
Robert W. Gefvert
Michael J. Gehlen
Mark N. Gehrige
Richard L. Gehring
A. J. Geller
Loren G. Geller
Esra F. Gencturk
Harry Gendler
D. Kenneth George
James R. George
Mary H. Gerlach
Charles E. Gerretson
Marlene Gibas
Donald J. Gibb
Jerry B. Gilbert, Sr.
Karen Jo Gilbertson
Gregory L. Gildner
Edward B. Gill, Jr.
Judith Gillam

Avis L. Gilleland
Kenneth F. Gillette, Jr.
David D. Gillham
Robert S. Gillman
David M. Gilman
Bruce W. Gilmore
Geraldine A. Gilson
Mark A. Giorgini
Raymond J. Giske
Marvin W. Gisvold
Elmer S. Given
William H. Gjetson
Gaylord W. Glarner
John J. Glass
Barbara J. Glauser
Larry W. Gleason
Philip W. Gleason
Russell L. Gleason
George G. Gleeson
Thomas J. Glisczinski
Thomas W. Glowaski
William H. Godbout
Ralph J. Godin
Malcolm H. Gold
Melvin F. Goldenbogen
Harold N. Goldfine
William S. Goldman
Laverne H. Gollnick
Edward A. Golusky
James Lee Gondorchin
Gerald H. Gonrowski
John A. Goodlad
Katherine G. Goodrich
Stanley C. Goodsill
Barbara Goodwin
Michael R. Gooley
Maitri Goonewardena
Mark S. Gorder
Stanley L. Gordon
Lindsay J. Gorman
Deborah B. Goss
Duane A. Gouze
Robert L. Govett
Jack C. Graeber
Timothy J. Graff
John W. Granath
Jerald D. Grande
Bruce J. Granos
Michael A. Grant
Vincent T. Graupmann
Steven L. Graves
Charles T. Green
Emerson P. Greenberg
Grietje N. Greenberg
Leo Gregory
Scott K. Gregory
Douglas A. Greven
William J. Griesau
Dennis E. Griffis, Jr.
Catherine A. Grimm
Kennard E. Grimm
Catherine A. Griner
Scott W. Groth
Franklin N. Groves
Joey A. Growette
Dennis J. Grundman
Stephan C. Grygar
Richard E. Gudmundson
Eugene M. Guffan
John A. Gulbranson
Joanne M. Gunderson
Jody Gunderson
John L. Gunkelman
John R. Gupta
Jane E. Gustafson
Leonard H. Gustafson
Rolland P. Gustafson
Thomas A. Gustafson
Charles F. Gustner
Stanley J. Guzik, Jr.
Ildiko A. Gyorky
Andrew Q. Haak
Harlan M. Haanpaa
Donald M. Haas

Richard L. Hable
Bonita J. Hackner
Christian R. C. Hafstead
Howard J. Hagedorn
Jeffrey S. Hagerman
Todd W. Haglund
Gary Hagopian
Ronald A. Hahn
Lorette A. Haight
James T. Haire
George A. Halberg
Kermit W. Halden
Mark A. Hallberg
Richard A. Hallberg
Harlan E. Hallquist
Gregory A. Halverson
Vernon A. Halvorson
Francis G. Hamilton
Gary R. Hamilton
Robyn D. Hamlin
Norman J. Hammergren
Vicki L. Hammerstrom
Darrell W. Hammond
Bruce H. Hanley
Ann L. Hanna
Kenneth C. Hannemann
Gordon Eugene Hansen
Leland W. Hansen
Bruce N. Hanson
Gerald A. Hanson
Gerald B. Hanson
Joann S. Hanson
John W. Hanson
Jon D. Hanson
Kay E. Hanson
Ryan L. Hanson
William D. Hanzlik
C. R. Harholdt
Michael R. Harley
David B. Harmet
Barbara B. Harmon
Brock J. Harmon
Douglas D. Harmon
Mark P. Harrington
Michael S. Harrington
James C. Harris
Mary Harris
Victory S. Harris
Robert J. Hart
Ione I. Hartley
Linda E. Hartman
David W. Harvey
Sandra K. Haselberger
Bruce D. Haslerud
Thomas L. Hathaway
David C. Hatlestad
Courtland Haugen
John Hauschild
Thomas J. Hauschild
Michael H. Havlik
Laura J. Haw
Thomas E. Hawes
Hugh E. Hawkins
Robert M. Hawkins
Mark G. Hawkinson
James C. Hawley
Minoru Hayashi
Philip N. Hayes
Howard C. Healey
Michael A. Hebner
Russell C. Hedlund
Edwin Heft
Michael J. Hegstad
James E. Heidelberg
Ruby D. Heiden
Albert H. Heimbach
Michael D. Heine
James R. Heintz
Ronald S. Heinz
Debra A. Heintel
Fred H. Heiseke
Penny C. Helberg
Steven J. Helgen
Osmond J. Hellen

Linda A. Henderson
Mary S. Henderson
Thomas C. Henderson
Elayne R. Hengler
Steven J. Hengstler
Alfred G. Henjum
James P. Henninger
Douglas E. Herberg
Diane L. Herman
Georgianna E. Herman
Albert E. Hermann
Douglas P. Herr
Gerald M. Hersman
Jean Herzberg
John T. Hessburg
Dan Hessel
Thomas M. Hestwood
Richard M. Hetland
Cynthia A. Heymans
Charles L. Hildebrand
Ronald J. Hilgert
George H. Hill, Jr.
James R. Hill
Stanley J. Hille
Lisa R. Hillesheim
David C. Hillstrom
Alex Himmelman
Roger W. Hinze
Marsha J. Hipp
Steven A. Hire
Sandra K. Hirsch
William H. Hite
Richard D. Hladky
Christina Ho
Tien-Ming Ho
Thomas A. Hoblit
Mark A. Hodsdon
Joan J. Hoeglund
Howard A. Hoese
L. O. Hoff
Lyle R. Hoff
Kirk Hoffman
Linda K. Hoffman
Peter G. Hoffman
Roderick J. Hofschulte
Dennis J. Hogan
Michael T. Hogan
William G. Hogle
Charles E. Hoistad
Margaret J. Holden
Kenneth H. Holec
Earl H. Holle
Douglas B. Hollenbeck
Edward B. Hollingsworth
Ward K. Holm
Helen L. Holmes
Herbert R. Holmsten
Sally Holt
William T. Holte
James E. Holzapfel
Roderick V. Hood
Dorothy A. Hopf
Lyman B. Horton
Bert Horwitz
Thomas M. Houchins
William C. Houck
Julie M. Houghton
Sandra L. Hove
Arne S. Hoverstad
William R. Hrabe
Robert K. Huang
Gary A. Huber
Mark J. Huber
Roger A. Hubley
Michael A. Huck
Michael R. Hudson
Thomas L. Huggett
Daniel C. Hughes
John D. Hughes
Diane D. Hull
Gary R. Hult
Deborah A. Hum
Ronald J. Humm
Robert L. Hunegg

James E. Huninghake
Stanley M. Hunt
Warren F. Hunt
P. J. Hurley
Orthos A. Huseby
Randi J. Huseby
Edwin R. Hush
Patricia N. Huson
Jeffrey L. Hvass
Helen E. Iberg
Michael G. Iblings
Marjory C. Immer
Sandra K. Indahl
Timothy G. Indihar
Nadine B. Ingebrand
Roger L. Ingebritson
Richard M. Irvin
Rosanne Iskierka
Frank H. Ittner
Noel A. Iverson
Michael T. Jackelen
Ronald E. Jackelen
Brian J. Jackson
Pamela E. Jackson-Young
Dorothy & Sam Jacobs
William C. Jacobs
Marietta J. Jacobsen
Carol A. Jacobson
Erwin T. Jacobson
Philip D. Jacobson
Richard L. Jacobson
Theresa A. Jacobson
Thomas D. Jacobson
Jody Jacobson-Manuele
Marlys H. Jacoby
Stephanie I. Jaeb
Dale C. Jaffrey
Karen A. Jakse
Donald D. Jancikla
Harold G. Jansen
Rudolph Janzen
Tally H. Jarrett, Jr.
William A. Jarvey, Jr.
Eugene N. Jaster
Neal J. Jenewein
William S. Jenkins
Daniel L. Jensen
Grant C. Jensen
Thomas D. Jensen
Eugene D. Jiracek
Steven R. Johannessen
Charles C. Johansen
Diane L. John
Alan H. Johnson
Brian R. Johnson
C. J. Johnson
Charles R. Johnson
David B. Johnson
Gary D. Johnson
Donald M. Johnson
Eric L. Johnson
Frederick D. Johnson
George K. Johnson
Glenn E. Johnson
Harry M. Johnson
James D. Johnson
Jeffrey A. Johnson
Karen H. Johnson
Kendal A. Johnson
Kenneth O. Johnson
Kent J. Johnson
Lee A. Johnson
Leland K. Johnson
Linda K. Johnson
Loren W. Johnson
Lyle J. Johnson
M. E. Johnson
Martin C. Johnson
Marvin J. Johnson
Maynard B. Johnson
Peter J. Johnson
Robert W. Johnson
Roy S. Johnson
Scott H. Johnson

Stephan R. Johnson
Thomas R. Johnson
Todd H. Johnson
Todd W. Johnson
Virginia A. Johnson
Wayne C. Johnson
Wayne R. Johnson
Wayne R. Johnson
William M. Johnson
David W. Johnston
Jeffrey A. Johnston
Raymond E. Jokinen
Donald E. Jondahl
C. Robert Jones
George L. Jones
Willys P. Jones
Edward V. Jorczyk
Lawrence L. Jordan
Robert W. Jorgensen
Cynthia A. Joyce
Jerome C. Juelich
Hugh F. Juergens
Marvin D. Juliar
Richard E. Juntilla
Loran A. Kaardal
Wencl T. Kadrlík
Larry G. Kahler
Kermit L. Kalleberg
Irwin E. Kallin
Keith E. Kamerer
Mitchell A. Kamon
Richard D. Kampa
S. Gene Kanofsky
R. William Kansas
James M. Karges
Thomas R. Karges
R. S. Kari
Richard A. Karlberg
Thomas G. Karlson
James A. Karnas
Michael J. Karnas
Robert I. Karon
James C. Karosich
Michael J. Karpen
Ann M. Karschnia-Fischer
Gregory M. Kask
Margaret M. Kasper
Steven W. Kast
Gustave W. Kathmann
Jeanne Katz
David O. Kauppi
Isao Kawamoto
George E. Kayser
Beatrice Kearney
Lawrence J. Keillor
Frederick H. Kela
Mary E. Kessler
Michael P. Keller
Jane E. Kelley
Terrance P. Kelly
Ronald I. Kelner
Marilyn R. Kemme
John T. Kemp
Peter E. Kenefick
Colleen M. Kennealy
Steven D. Kenney
Tobin E. Kent
Joseph D. Kenyon
Wayne E. Keplinger
Raymond F. Kessler
Kathryn M. Kienholz
Maurice D. Kilmer
Joseph G. Kimmel
Gerald E. Kimmer
Patricia J. King
Roger L. King
Gerhardt P. Kirchmann
Randolph J. Kirihara
Warren K. Kirk
John T. Kisch
Marjorie S. Kitson
Bonnie J. S. Kittell
Shirley D. Kitzmann
Donald F. Klassy

Alan D. Klein, Jr.
David Alan Kleppen
Otto B. Klett
Jerry D. Kline
R. Neil Kline
Ronald G. Kline
Robert V. Kling
Paul E. Kloster
Keith D. Knauss
Robert H. Knoch
Mary J. Knoll
Vernon L. Knudsen
Bruce W. Knudson
Carlyn D. Knudson
Thomas W. Knuesel
John A. Knutson
Richard C. Knutson
Richard C. Koch
Sheri T. Koch
Craig G. Kochsiek
John E. Koci
Paul F. Koernig
Dawn M. Koerten
George R. Kohler
Patrick H. Kohler
Andrew A. Kole
David M. Kolkind
Ronald A. Kolquist
John M. Kopenhafer
Deborah K. Kos
Gregory D. Koschinska
Donald E. Koski
Marguerite Kosmas
Robert B. Kosse
Jill M. Kovala
Kenneth A. Kozar
Douglas F. Kraft
Patricia J. Krause
Robert J. Krausert
Jan E. Krentz
Timothy W. Krenz
Douglas M. Krinke
Robert W. Krita
Scott D. Krizan
Joel M. Krogstad
Jan G. Kronholm
Daniel K. Kubicek
Mark D. Kuck
Steven C. Kumagai
John E. Kumpf
Gregory F. Kurtz
Lawrence A. Kurzeka
John A. Kvam
J. Peder Kvamme
David J. Kvasnicka
Peter T. Kwong
Nancy J. Laciak
Stephen F. Lackner
David E. Laden
Monica L. La Douceur
Glenn M. Laedtke
Nicholas L. Lafontaine
Stephen D. Laing
Robert E. Lambert
Duane D. Lambrecht
Linda S. Lammers
Harold J. Lamon, Jr.
Allan O. Landkamer
Dorothy K. Landry
Thomas A. Lang
Kathleen J. Langton
Garry L. Lano
Clayton K. Larson
David R. Larson
Duane H. Larson
Edward M. Larson
Edwin A. Larson
Gerald A. Larson, Jr.
Marian Larson
Philip A. Larson
Ronald J. Larson
Steven A. Larson
Kenneth A. Latta
Lawrence J. Latterell

Harry D. Latts
Margaret M. Lauer
Rudolph F. Laueremann
Dennis H. Laufenburger
Edward V. Lauing, Jr.
Robert M. Launer
Richard J. Lavigne
David A. Lawrence
Archie A. Ledegar
Gerald I. Lee
Kent A. Lee
John H. Lefevre
Martin A. Lehman
Peter B. Lehman
Ernest A. Lehmann
Timothy J. Lehn
Colette E. Lehrke
Arnold Lehrman
Jack E. Leibman
B. C. Lemke
Paul L. Lemmons
William F. Lenker
Merle P. Lennartson
Lisa L. Lenning
Janice M. Le Page
Mark S. Lerman
John P. Leschke
Timothy J. Lesnar
William C. Lessard
John M. Le Voir
Lois D. Lewis
Richard L. Lewis
Thomas J. Lewis
Edward S. Libby
Martha E. Licke
Eloise M. Lidberg
Richard C. Liddom
Richard A. Lidstad
Bruce Lieberman
Melvin P. Lijnsing
John B. Lilja
James G. Lilyquist
Richard J. Limborg
Faye A. Lind
Kenneth M. Linden
Paul E. Lindholm
Adolph W. Link
Karen B. Linnard
Janet L. Linner
Craig D. Litsey
Marvin R. Loff
Lloyd V. Lofgren
Scott V. Lofgren
Robert P. Logue
George C. Lohmer, Jr.
James Allan Long
Timothy P. Long
Russell J. Loomis, Jr.
Kathleen F. Lossing
Jerry C. Lothrop
Frederick H. Lott, Jr.
Lois A. Loveless
Jeffery R. Loverude
Ted E. Lovrien
Ronald L. Low
Paul L. Lucas
Roger M. Lucht
Helen S. Lueben
Howard G. Luick
Olive A. Lund
Richard E. Lundborg
Carroll J. Lundeen
Dwayne M. Lundgren
Richard E. Lundquist
Thomas F. Luse
Susan L. Luttrell
Patrick J. Lyden
Donald D. Lyford
Richard C. Maass
Bruce D. Machacek
Thomas J. Machacek
Gregg G. Madsen
Matthew C. Madsen, Jr.
Irene M. Maertens

Stephen J. Mages
Marvin S. Magnuson
Rodnick J. Mahn
Diane M. Mahon
Peter Mailandt
Melorn H. Maisel
Leo G. Majerus
Daniel C. Makey
William R. Maki
Charles E. Malmberg
Alvin S. Malmon
James P. Mangan
Carl R. Manson
Craig G. Manson
Mark E. Manthey
Alan J. Manuel
Charles J. Marboe
Edward J. Marek, Jr.
Peter Steve Margitan
Michael P. Marotteck
Stephen W. Marquesen
David S. Marrinson
Everett L. Marsh
Marvin A. Marshall
Richard H. Martens, Sr.
Gerald R. Martin
Paul J. Martin
W. A. Marx, Sr.
Patricia J. Maschke
Nancy A. Mason
John S. Mathias
Catherine Jane Mathis
Curtis A. Mathison
Diane Matson
John L. Matthews
Allan R. Matthys
Anita B. Mattson
Bruce H. Mattson
Douglas L. Mattson
Jeffrey A. Mattson
Robert C. Mattson
Ronald F. Mattson
Donald M. Mattsson
Lola J. Maurer
Melvin J. Maurer
Bonita J. Maxwell
Robert C. Maxwell
E. Allen Mazorol
Irene F. McAllister
Steven W. McArthur
Karla M. McBrean
Gerald A. McCabe
Penelope L. McCarran
John A. McCarthy
Pamela A. McCarthy
John D. McCormick, Sr.
Ralph G. McCoy
Michael J. McCue
David A. McCulloch
David R. McDonald
Michael J. McFarlane
Robert J. McFarlin, Jr.
Julia M. McGoldrick
Patrick M. McGowan
John P. McGrand
John B. McGrath, Jr.
Mark P. McGree
Michael J. McGroarty
Craig T. McKay
Timothy P. McKeever
Robert A. McKinstry
William T. McNabola
Dennis M. McNamara
Kristi A. McNamara
Shirley L. McNea
John F. McNerny
Paul E. McQuaid
Michael A. McShane
Thomas M. McShane
Robert J. Meath
Ashok K. Mehrotra
Mary Ann Mehus
Gerald W. Meier
Joni L. Meilahn

Robert L. Meisenheimer
Howard W. Melbostad
Hans L. Melgaard
Susan D. Mellman
Elizabeth A. Mellon
Nancy P. Melone
James C. Melville
Myron P. Memmer
Marvin L. Menken
Michael J. Merriman
Wallace Mertensotto
Albert J. Merz
Karl H. Mettke
Robert L. Metzger
Thomas G. Metzger
Keith A. Meyer
Richard J. Meyer
Rudolph F. Meyer
Lawrence E. Michelini
Wayne A. Mikkola
Thomas C. Mikulay
David J. Miller
Forrest W. Miller, Jr.
Francis W. Miller
Frederic M. Miller
Marcus J. Miller
Maryann J. Miller
Michael C. Miller
Michael J. Miller
Richard J. Miller
Richard M. Miller
Rose E. Miller
Steven E. Miller
Wayne G. Miller
James R. Milnor, Jr.
William C. Milon
Arlen H. Missing
Judith I. Mitchell
Donald O. Modeen
John P. Moe
Robert S. Moe
Margaret A. Moeller
Luther J. Moen
Steven R. Moffatt
Coenraad L. Mohr
Timothy G. Mohr
Timothy D. Mohs
Edmund J. Mokrzycki
Doris J. Molitor
Barry T. Mornchilovich
Donald E. Monk
Thomas M. Montague
Thomas A. Mooney
Terry S. Moores III
Shane R. Moriarity
Samuel B. Morrison
Sandra L. Morris
Robert W. Morrison
Norman G. Morrisson
James E. Morse
Herbert C. Morton
Robert V. Mott
Thomas E. Mowery
Eugene E. Moynagh
Joseph R. Mucha
Cynthia J. Mueller
John P. Mueller
Thomas I. Mueller
Paul J. Mullaney
Thomas M. Mullen
James S. Mulvey
Richard A. Mundhink
Thomas E. Mungavan, Jr.
William F. Munson, Jr.
Winston E. Munson
Marjorie C. Munter
Gilbert W. Murphy
Jeffrey B. Murphy
Lawrence J. Murphy
Timothy A. Murphy
Warren J. Murphy
Richard H. Musser
William J. Myers
Richard D. Myklebust

James R. Nachtsheim
Ruth S. Nagel
Susan B. Narayan
Carol L. W. Nau
E. Burke Neff, Jr.
Reuben E. Neitzel
C. Edgar Nelson
C. Roger Nelson
Gary Nelson
George W. Nelson
Harley W. Nelson
Helen J. Nelson
Helen L. Nelson
Jack R. Nelson
Jeffrey T. Nelson
Jon R. Nelson
Kenneth J. Nelson
Leon N. Nelson
Marion C. Nelson
Morris T. Nelson
Roger M. Nelson
Sidney A. Nelson
Thomas W. Nelson
Tore C. Nelson
William H. Nelson
William K. Nelson
Donald S. Nemerov
James D. Nermyr
Shielah L. Nerva
Richard A. Ness
David L. Neumann
James W. Neuwirth
Dao T. Nguyen
Jane M. Nichols
Donald M. Nicholson
Richard W. Nicholson
Sean P. Nicholson
Evangeline Nicklow
Paul A. Nicolai
Ronald J. Nida
Harold P. Nielsen
Gregory D. Niemela
Ronald M. Niemi
Kenneth R. Nilsestuen
Edwin C. Nokua
Richard W. Nolander
Philip H. Nomura
Scott A. Nord
Dean W. Nordahl
Judy L. Nordland-Nyman
Brian R. Nordling
Douglas A. Norr
John M. Norris
Margaret Northridge
Arlen D. Norwood
Kathleen M. Novak
Julie A. Novakoske
Linda E. Novotny
Jerry V. Noyce
Robert T. Noyes
Ross Harold Nyberg
Terry R. Nygaard
R. Stanford Nyquist
Richard E. Oakes
Roy R. Oberhamer
Allen W. Oberholte
Mark J. Obert
Eileen J. O. Byrne
Andrew J. O'Connell
Howard V. O'Connell, Jr.
Brian J. O'Donnell
Kim Ohlhauser
Robert F. Ohlson
Rudolph G. Ohlson
Elliot C. Ohlund
R. C. Oja
Paul W. Olander
Patrice Olanderquamme
David W. Oldenburg
Thomas E. Oleson
James R. Olsen
Roger B. Olsen
Alden C. Olson
Dennis A. Olson

Douglas L. Olson
Earl E. Olson
Frederick C. Olson
Gaylord S. Olson
Glendon K. Olson
J. R. Olson
John A. Olson
John M. Olson
Kenneth O. Olson
Leonard F. Olson
Marvin M. Olson
Pamela F. Olson
Robert C. Olson
Robert D. Olson
Robert G. Olson
Steven O. Olson
Thomas G. Olson
William C. Olson
Arthur F. O'Neil
Katherine K. Onken
Jack L. Onstott
Clayton W. Oosterhuis
Robert J. Oothondt
Arnold O. Oprgrand
Suzanne M. Opitz
Emmanuel A. Opoku
Paul A. Opsahl
Patrick G. Orbin
James L. Orenstein
Roger T. Ormand
Thomas W. Orr
Margaret A. Osborne
Daniel P. O'Shea
Timothy D. Osking
A. Bernhard Ostby
Lloyd W. Osteen
George E. Ostrom, Jr.
Thomas H. Otley
Miles W. Ottinger
Jonathan K. Otto
John D. Overbye
Michael F. Overline
Richard N. Owen
William J. Oxtun
John V. Oyen
Richard G. Pagel
Govind Pailoor
George R. Palkie
Dennis M. Palm
Terrence J. Palmer
James E. Palodichuk
Bruce E. Pankratz
Wayne G. Parker
Patricia A. Parrish
J. Thomas Parry
Charles A. Parsons, Sr.
Gregory L. Parsons
Harold J. Passaneau
Bruce A. Pastorius
Victoria K. Paterline
Wesley F. Patience
Stephen J. Patnode
Robert A. Patrick, Jr.
M. Bentley Patterson
Jeannie M. Paulos
Kermit L. Paulsen
J. Peter Paulson
Mark P. Pautsch
Bruce B. Pazandak
Eugene C. Peace, Jr.
Douglas E. Pearson
Ford G. Pearson
James R. Peavey
H. M. Pederson
Seymour V. Pederson, Jr.
Enoch Peeri
Cora Pepper
Steven T. Pepper
Charles S. Peick
Michael A. Pelto
Marvin J. Pennington
Richard D. Peppin
Bruce C. Perkins
Carol S. Perkins

Allan L. Perry
John A. Perry
Robert E. Perry
Marvin J. Pertzik
Roland O. Peteler, Jr.
La Verne D. Peter
Gary L. Peterman
Brian S. Peterson
Daniel R. Peterson
David J. Peterson
Dennis E. Peterson
Donald L. Peterson
G. Warren Peterson
Gregory A. Peterson
Jack R. Peterson
Keith A. Peterson
Kenneth A. Peterson
Mark A. Peterson
Michael C. Peterson
Russell Peterson
Susan J. Peterson
Michael J. Peterzen
Gary W. Petrich
Walter V. Petrich
John N. Petropoulos
Gerald S. Pettersen
Stanley J. Pettersen
Ralph R. Pettyjohn
Brad G. Pfahning
John R. Pfund
Luann L. Pheneger
Michael J. Phillips
Rebecca L. Picatoste
John S. Picek
Leroy F. Piche
Robert R. Piche
Virginia K. Pichner
Beth M. Pickering
Theodore W. Piculell
Leo A. Pierce
Thomas A. Pieri
David A. Pierson
Thomas A. Pilon
Julia L. Pine
Bradley D. Platt
Joseph V. Plumbo
Thomas O. Pohlard
Ralph H. Pohland
Gary E. Polaczyk
Jeffrey Polkinghorne
Michael D. Pommer
Kathryn E. Popham
William F. Poppe
James R. Potter
David A. Pratt
Walter E. Pratt
David C. Prem
Peter P. Prestegaard
James W. Price
Robert Proebstle
Richard A. Prouix
John B. Pugaczewski
Howard D. Punch
Susan J. Purkat
Karin P. Purnell
Laurence L. Quam
Terry A. Quam
Warren P. Quarnstrom
Roger L. Quigg
Steven E. Quigley
Joseph B. Raab, Sr.
Jeffery L. Radunz
Lynn M. Radunz
Daniel G. Ramaekers
Dean B. Randall
Eric S. Rangen
Richard G. Rapp
Mary E. Rasmussen
Susan R. Ratz-Solberg
Lee A. Rau
James W. Ravell
Patrick R. Reardon
Anthony J. Reber
Robert M. Redmond

J. Samuel Reeve
Diane J. Rehbein
Leo R. Rehmann
Roswell B. Rehnke
John G. Reichert
Jack N. Reif
Kenneth R. Reinartz
Joseph G. Reischel
Leann B. Reiss
Scott D. Reitan
Steve A. Reiter
William G. Reker
Oliver B. Rekow
James E. Remington
Clifford A. Renna
William J. Rennie, Jr.
Michael E. Renslow
David A. Reschetz
John A. Rhody
Jerome A. Ribnick
Gerald D. Rice
Kenneth R. Rice
Kenneth A. Richard, Jr.
Daniel J. Richter
William H. Riley
Jessica Blair Risser
Larry E. Rittenberg
Steve J. Ritter
D. S. Rivard
Dolores M. Robb
Henry B. Roberts
Paul G. Roberts
Saxe G. Roberts
W. G. Ted Roberts, Jr.
Ennis D. Robertson
William C. Robinson
Craig H. Rocheleaj
John J. Rockwell, Jr.
Lawrence N. Roden
James H. Rodgers
Terry A. Rodgers
Peter J. Roedel
Catherine A. Roeder
Raymond Robert Roeller, Jr.
Deborah K. Roesler
Robert C. Roesler
Cyril C. Rogers
Timothy S. Roggenkamp
Randy L. Roiko
Leslie A. Rolloff
Aron Rolnitzky
Beatrice F. Ronning
Warren A. Ronsen
Colleen T. Rooney
Richard D. Rooney
James C. Rose
Thomas J. Rose
Roland R. Rosebrock
Betty M. Rosen
Barry A. Rosenzweig
Richard A. Rotegard
Donald S. Roth
William G. Rothstein
Kenneth J. Roufs
Robert L. Rouze
Jerome O. Rowe
Matthew L. Rowles
David D. Rozman
Charles Rubenstein
Stuart A. Rubin
Thomas J. Ruble
Stacy D. Rubsam
Paul E. Rudeen
Robert A. Rudolph
Randall L. Ruegg
Charles E. Rupar
Bonnie R. Russ
Flossie Marie Russ
Cynthia L. Russell
T. Eileen Russell
James W. Rustad
Boyd A. Rutledge
Judith S. Rutscher
David P. Rutten

Randy S. Rutzick
Gerald M. Ryan
J. R. Ryan
Murray J. Ryan
Shawn M. Ryan
Thomas L. Ryan
Thomas P. Ryan
James A. Rydeen
James H. Rylander
Scott W. Rynda
Esther E. Saarela
David P. Saari
Isadore J. Saide
Craig A. Saline
Larry J. Salmen
Joel T. Salsberg
Roger L. Salsbury
Richard M. Salvatore
Thomas C. Sample
Curtis A. Sampson
Charles E. Samson
Dean C. Sanberg
Debora J. Sanberg
Glen C. Sandager
Norman F. Sandberg
Arend J. Sandbulte
Carl E. Sandeen
Mark A. Sandell
Michael J. Sander
David M. Sanders
Arthur W. Sands
Elizabeth J. Sands
Elwyn H. Sands
Leonard L. Sands
Steven E. Sandvig
Paul H. Sapp III
James H. Satersmoen
Arthur J. Sauter
Bruce W. Shadow
Thomas L. Schaefer
Kenneth H. Schaffer
Raoul E. Schander
Warren B. Schauer
Herbert S. Schechter
Steven L. Schectman
William J. Scheela
Ronald G. Scherman
David M. Schiller
Carol M. Schilling
Donald K. Schimmel
James A. Schlieper
Debra A. Schmidt
Rolle Schmidt
Phillip G. Schmidt
Thomas H. Schmidt
Charles E. Schneider
Randy R. Schoeneck
Anthony H. Schoenecker
Thomas A. Schomaker
Vince D. Schoon
Wilma K. Schopp
Floyd C. Schraan
Chris D. Schreier
Michael J. Schroeder
R. J. Schueth
Daniel R. Schultz
Floyd and Bette Schultz
Richard D. Schultz
Daniel D. Schulz
Robert W. Schumacher
Raymond J. Schuster
Diana L. Schutter
Carol Schwichtenberg
Susan G. Schwochau
Brett E. Scribner
John R. Searle
Gordon C. Seeler
Sharon A. Segal
Jerome H. Seiberlich
Steven J. Seiler
George M. Selcer
Joan M. Selover
Lewis H. Seltz
Phillip G. Semmer

Eugene R. Setterstrom
Richard L. Severe
Ronnie L. Severson
Steven R. Severson
Cary M. Shaich
Michael J. Shapiro
Robert M. Shaughnessy
David R. Shellenberger
Warren W. Shepley
John R. Sheppard
Stephen W. Sherf
Alan L. Sherr
Terry E. Shima
Norman Shimakawa
Anne G. Shindler
James C. Shirley
Daniel J. Shore
Michael Shores
Robert C. Shoup
David L. Shroyer
Frederick R. Shuback
Stanley L. Sieberg
Bruce R. Siegfried
John T. Siegfried
Robert G. Siekert, Jr.
Steven J. Sielaff
Morton D. Silverman
Mark L. Simenstad
William H. Simmons
Kenneth D. Simon
Phillip D. Simon
Robert J. Simon
Robert M. Simon
Mark J. Simones
Anne L. Simonet
Mildred M. Simpson
Raymond J. Sindermann
Sherwin L. Singsaas
Curtis L. Sippel
Jerald B. Sitek
Stephen K. Sitkoff
Brian C. Sjoberg
Audrey O. Skaar
John P. Skalbeck
Arthur M. Skauge, Jr.
Georgia Skjold
Lee B. Skold
John P. Skram
Cheryl L. Skrypez
Edward E. Slanga
Margaret D. Slattey
Deborah A. Slavin
Keith B. Sletten
Ervin M. Slind
Gregory A. Smetana
William Y. Smiley, Jr.
Blanchard B. Smith
Dana W. Smith
Daniel J. Smith
David E. Smith
David M. Smith
Dolores N. Smith
Gary A. Smith
Harold J. Smith
Harry J. Smith
Hibbard A. Smith
Joan T. Smith
Keven D. Smith
Kristine J. Smith
Lyle G. Smith
Martin G. Smith
Richard I. Smith, Jr.
Richard T. Smith
Roy W. Smith
Stuart A. Smith
Suellen T. Smith
Anita E. Smits
Clarence Will Snedeker
Douglas C. Snure
James L. Snyder
Milton L. Snyder
Richard A. Snyder
Hugh W. Solberg
Carl K. Somekawa

L. W. Somers
Audrey A. Sommerfeld
Gerald R. Sonderup
Neal E. Sorensen
Richard E. Sorensen
Brenton G. Sorlien
Kenneth L. Sovereign
Thomas D. Spaeth, Sr.
Lois I. Spear
Debra F. Spencer
Susan A. Spertl
T. Harris J. Sperouelas
Kathryn J. Spitzmueller
Charles M. Sprafka
David E. Sprangers
Joseph L. Spurrier
Kraig M. Srdar
Thomas J. Stack
Philip W. Stahl
Theodore M. Stahl
Gwen N. Stanley
Gary J. Staples
Jean M. Stark
Terry D. Starks
David M. Stearns
Norman M. Steck
Michael J. Stefanson
Michael J. Steffen
Mark A. Stegemoeller
Thomas G. Steiger
James R. Stein
June B. Stein
Rodney E. Stein
Shelley S. Stein
Frederick G. Steinbach
Joseph G. Steinberger
Teresa M. B. Steiner
Joseph F. Stejskal
Gregory J. Stelzner
Robert H. Stenberg
Donald J. Stenger
Carl L. Stenstrom, Jr.
Roger D. Stenzel
Bruce R. Stepnick
Richard H. Stern
Duane D. Stuart
Burrowes G. Stevens III
Gary L. Stevens
Robert G. Stevens
Charles A. Stewart, Jr.
James R. Stewart
Austin J. Stibbe
Charles H. Stoddard, Jr.
Martin V. Stoesser
Ronald K. Stoffel
Roger A. Stoick
Genevieve D. Stokes
William T. Stoll
Jane E. Stoller
Kevin S. Stoltman
Wallace F. Stommes
John B. Stone
Lorne S. Stone
Maureen E. Stone
Bradley J. Stoneberg
Scott R. Storrar
Benjamin S. Story
Gaylord S. Strand
Kurt L. Strand
Larry D. Stromberg
Alan M. Struthers
Vernon R. Stubbs
Thomas L. Stube
Carol S. Buelow
Gordon J. Stutzman
Michael F. Styba
Daniel B. Sullivan
Jeanette M. Sullivan
Kevin M. Sullivan
Arthur B. Summerfield
Julius C. Sund, Jr.
Dean A. Sundquist
Donald M. Sundt
Al T. Super

Robert S. Sustak
Thomas R. Suter
Daniel L. Svendsen
Thomas M. Swain
Lewis T. Swaja
Norris G. Swanburg
Bruce R. Swanson
David R. Swanson
Jeffrey M. Swanson
Randall J. Swanson
Robert B. Swanson
Robert E. Swanson
Roy E. Swanson, Jr.
Thomas I. Swanson
Stephen C. Swenson
L. Robert Swift
William J. Swing
Gary A. Swoverland
John G. Szafranski, Jr.
Richard K. Takaki
Scott J. Takekawa
William E. Tanner
John M. Tarbox
Julian C. Teigen
Gerald C. Tellers
Russell N. Tempelman
Stanley Y. Tenenbaum
James V. Tennesen
Michael W. Tenney
Susan M. Tertell
William E. Tessmer
Mary K. Teynor
Loren R. Thacker
Elaine L. Theissen
Leonard L. Thiede
Craig M. Thiel
David H. Thiessen
Doris M. Thomas
Scott W. Thomford
Daniel C. Thompson
Neil G. Thompson
Robert B. Thompson, Jr.
Diane M. Thomson
Steven J. Thoresen
O. C. Thorpe
Thomas W. Thul
Karyl L. Thurston
Edward A. Tickner
Theresa J. Tierney
Donald C. Tift
Paul E. Tillotson
John F. Timmer
Stanley R. Timmer
Gregory D. Timmers
Ronald B. Tlougan
Timothy A. Tobin
Gary L. Tobison
Randolph M. Tolmie
Franklin R. Tomaschko
Bernard J. Toner
Harold W. Torgerson
Eugene A. Torrey
James W. Torseth
Howard L. Torstveit
Bruce R. Toskey
Lisa W. Tovin
William R. Towery
Edward A. Towey
Elisabeth J. Trach
Barton W. Trapp
Robert T. Trautman
James B. Treleven
Gene G. Tremaine
Gerald J. Trenda
Richard T. Tressel
Frank D. Trestman
McClelland Troost
Richard C. Trowsell
Robert W. True
Joan D. Tschida
Anne S. Tsui
John G. Turner
Kent R. Turner
Keith A. Ulstad

Paul F. Unruh
Russell G. Upham
Gerald James Urban
Michael A. Urbanos
Jennifer L. Urbanski
John A. Urbanski
Kathy L. Urseth
David C. Utoft
Mark W. Utter
Gerald F. Vacha
Lori A. Huston-Vadnais
Stanley T. Vaill
Jose M. Valdesuso
Janet K. Vanatta
Michael J. Vanderheyden
Catherine Van Der Schans
Douglas A. Vanderwerf
Robert F. Vangen
Jan Van Hauer
Mark S. Vanney
Jon L. Van Valkenburg
Stanley P. Vanvorst
Richard T. Vanwyck
Jane A. Vanyo
Robert S. Vathing
Teri L. Verduyn
Ted C. Victor
L. S. Viehl
C. Jo Viitala
Patrick T. Vincelli
Jeanne M. Vogelzang
Dale F. Vogt, Jr.
George W. Vogt
Ralph E. Vosters
Robert A. Waataja
John L. Wagner
Stephen J. Wahl
Alan P. Wahlin
Anthony W. Waldera
Rockford R. Waldin
Kern G. Walker
Lyle T. Walker
Thomas E. Walker
Irving H. Wallace
Michael L. Wallad
Gerald R. Wallin
Leo J. Wallis
Louise C. Wallner
Jeff H. Walton
Kenneth L. Wandke
Andy M. Wangstad
Hillard H. Ward
Harold F. Wardlaw
Ronald J. Warhol
Patricia A. Warnke
John A. Warren
Douglas J. Waterman
Charles E. Watson
Galen P. Wax
Robert V. Webb
Mary Lou Weber
Susan M. Weber
Charles M. Webster
John D. Webster
Warren F. Weck III
John A. Wedel
Robert G. Wedell
Randall J. Weestrang
William K. Wefring
James A. Weichert
Linda J. Weimar
Max G. Weingarden
Dorothea M. Weisman
Paul E. Weiss
Edward J. Welch
Mary J. Welter
Kristen K. Wenker
Danniel A. Wermus
Michael E. Wesley
William N. Westhoff
John J. Weston
Richard W. Weyrauch
Thomas M. Whaley
Dale E. Whinnery

Laura E. Whipple
Joseph P. White
Michael M. White
Richard M. White
Warren M. White
William T. Whitely
Richard B. Whiting
James A. Whitney
Julie L. Whitney
Gregory V. Wickman
Ross H. Wicks
Adrienne A. Wickstrom
Eileen J. Widing
Rebecca J. Widmer
Byran L. Wig

David B. Wightman
Margaret L. Wiita
Wallace W. Wilcox
Jane A. Wildung
Earl W. Wiley
Kim S. Wilke
Stephen M. Willett
Bonnie J. Williams
Charles J. Williams
Glen I. Williams
Theodore C. Willoughby
Brian V. Wilson
Carl R. Wilson
David A. Wilson
E. Arlene Wilson

James J. Wilson
Joan L. Wilson
Kenneth W. Wilson
David T. Wingfield
Thomas A. Winkels
Walter F. Winkler
Sherman Winthrop
Donald W. Wintz
Mary K. Wiseman Macnee
Kenneth C. Wojack
Michael W. Wold
Peter C. Wollstein
James O. Wolner
Richard M. Wolterman
Alice L. Woo

Linda W. Woo
George A. C. Woolley
Roger E. Worm
Leonard L. Worms
Daniel Warren Wray
Cheryl R. Wright
Robert A. Wright
Virginia M. Wright-Peterson
Donald J. Wujcik
Richard F. Wurzer
James N. Wyman
Joseph M. Yablonsky
Ralph S. York-Erwin
Robert Young
Richard L. Zabel

Paul A. Zagaria
Edward M. Zahler, Jr.
Randall H. Zats
Barbara J. Zeches
Michael J. Zempel
Bart L. Zibrowski
Bruce R. Ziemann
Bradley A. Zilka
James E. Zimmerman
Michael J. Znameroski
David L. Zuelke

In addition to individual donations, gifts from corporations, foundations and organizations contribute immeasurably to the strength of the school. In fiscal year 1985-1986 the groups listed below provided more than \$1.3 million in support of our educational and research programs.

ADC Telecommunications *
Abbott Laboratories
Aetna Life & Casualty Insurance
Alco Standard Corporation
Alcoa Foundation
American Can Company Foundation
American Hospital Supply Corporation
American Product & Inventory Control Society
Apache Corporation
Armco Foundation
Arthur Andersen & Company
Arthur Andersen & Company Foundation
The Arthur Young Foundation
Artograph Inc.
Atlantic Richfield Foundation
Bell & Howell Foundation
Bemis Company Inc.
Blandin Paper Company
Blue Cross & Blue Shield of MN
Boise Cascade Corporation
Borden Foundation Inc.
Burlington Northern Foundation
Burroughs Corporation
Bush Foundation
CNA Foundation
CPCU/Harry J Loman Foundation
Campbell-Mithun Inc. *
Cargill Foundation
Cargill Inc.
Caterpillar Tractor
Cenex
Champion International Foundation
Chevron USA Inc.
Chrysler Corporation
Cigna
Citicorp - Citibank
City Graphic
Cleveland Cliffs Foundation
Coast Envelope Company
Coca-Cola Bottling Midwest Inc.
Commonwealth Energy System Inc.
Continental Bank Foundation
Converse Inc.
Cooper Industries Foundation
Coopers & Lybrand Foundation
Cray Research Inc.
John H. Crowther Inc.
Curtis L. Carlson Foundation
Dayton Hudson Corporation for Target Stores *
Deloitte Haskins & Sells
Deloitte Haskins & Sells Foundation
Deluxe Check Printers Foundation
Diamond Shamrock Corporation

Digital Equipment Corporation
Divine Braufman Scherzer & Bros.
Donaldson Company Foundation
Donaldson Company Inc. *
Dow Jones
Dyco Foundation
EF Hutton & Company Inc.
Economics Laboratory Inc. *
Ellerbe Inc.
Emerson Electric Company
Equitable Life Assurance Society
Ernst & Whinney
Ex-Cell-O Corporation
Exxon Education Foundation
FMC Corporation
FMC Corporation Northern Ordnance Division *
FMC Foundation
Farm Credit Services
Fidelity Bank
Fingerhut Corporation
The Fingerhut Foundation
1st Bank of Chicago Foundation
First Bank System Foundation for:
First Bank Minneapolis
First Bank Saint Paul
First Trust Company Inc.
and all First Banks in Minnesota
First Bank System Inc. *
Ford Motor Company Fund
H. B. Fuller Company
Frank B. Hall & Company of Minnesota Inc.
The Gelco Foundation for Gelco Corporation *
General Electric Company
General Electric Foundation
General Foods Fund Inc.
General Mills Foundation
General Mills Inc.
Geo. A. Hormel & Company
The Gillette Company
The Graco Foundation
Grant Thornton Foundation
The Gustafson Family Foundation
Robert Half of Minnesota Inc.
Harris Foundation
Hewlett Packard
Hitchcock Industries Inc.
Honeywell Foundation
Honeywell Inc.
IBM Corporation
IDS Financial Services Inc.
Integrated Software Systems
Inter-Regional Financial Group
Foundation for Dain Bosworth Inc. *

International Multifood Charitable Foundation
The Internorth Foundation
The Jefferson Foundation
John Deere Foundation
Johnson & Higgins Insurance Inc.
Johnson & Johnson
Johnsons Wax Fund
Jostens Inc. *
Kimberly Clark Foundation
Knight Ridder Newspaper Inc.
Koppers Company Foundation
Kraft Inc.
Lamaur Inc.
Larson Allen Weishair Company
LaSalle National Bank
Laventhol & Horwath
Leo Burnett Company Inc.
Lerner Foundation
Lutheran Brotherhood
Lyman Lumber Company *
Main Hurdman Foundation
Marathon Oil Foundation
Marsh & McLennan Inc.
Mayo Clinic *
Mayo Foundation
May Stores Foundation
McGill Jensen Inc.
McGladrey Hendrickson & Pullen
McKesson Foundation
Mead Corporation Foundation
The Medtronic Foundation
Medtronic Inc.
Meredith Corporation
Merrill Lynch
Midwest Direct Marketing Association
Minnegasco Inc.
Minnesota Bankers Association
Minnesota Mutual Life Insurance Company
Minnesota 1752 Club
Montgomery Ward Foundation
Mutual of Omaha
NCR Foundation
National Life Insurance Co.
National Med. Enterprises Inc.
Ness Waller Pearson & Company
New England Merchants Leasing
New Morning Windows
North Atlantic Life Insurance Company
Northern Life Insurance Company
Northern States Power Company *
Northern Telecom System Corporation
Northwest Orient Airlines
Northwestern Bell
Northwestern National Life Insurance Company *
Norwest Bank Bloomington
Norwest Bank Minneapolis
Norwest Corporation *
Norwest Foundation
Norwest Information Services
Ohio National Life Insurance
Onan Corporation

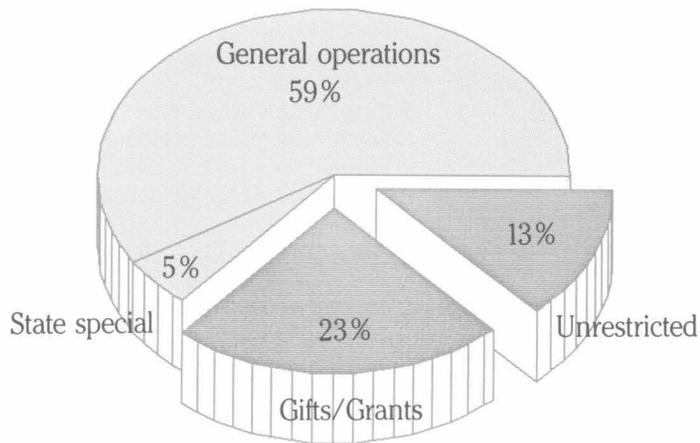
PPG Industries Foundation
PSFS
Peat Marwick Mitchell Foundation
Peat Marwick Mitchell & Company
Pentair Inc.
Pfizer Inc. *
Phillips Petroleum Foundation
The Pillsbury Company
Pillsbury Company Foundation
Piper Jaffray & Hopwood Inc.
Price Waterhouse Foundation
The Procter & Gamble Company
The Procter & Gamble Foundation
Provident Mutual Life Insurance
The Prudential Foundation
Remmele Engineering Inc.
Republic Airlines *
Rosemount Inc. *
RREEF America Partners
The St. Paul Company Inc.
Sara Lee Foundation
Security Life Insurance Company
Sioux Pipe & Equipment Company Inc.
Soo Line Railroad Company *
Sperry Corporation Foundation
Standard Oil Company (SOHIO) *
State Capitol Credit Union
State Farm Company Foundation
Steiger Tractor Inc.
Super Valu Stores Inc.
T. Rowe Price Association Foundation Inc.
Telex Communications, Inc. *
Temple-Inland Foundation
Tennant Company Foundation for Tennant Company *
Textron Charitable Trust
Thomas Betts Charitable Trust
3M Company *
3M Foundation
Toro Company *
Touche Ross & Company
Towers Perrin Forster & Crosby
Trammell Crow Associated Company
The Travelers Corporation
Travelers Express Company Inc.
True Companies
The Northern Trust Company
UFE Thermoplastic Technology
The UPS Foundation
The Union Mutual Charitable Foundation
Union Pacific Corporation
United Technologies
Upjohn Company
Valspar Corporation *
Valspar Foundation
WCCO AM/FM/TV
Wausau Insurance Company
Whitney Foundation
The Xerox Foundation
Yellow Medicine Rural Charities

* Associates of Curtis L. Carlson School of Management

Sources of funds

Among the University of Minnesota's nine professional colleges, the Curtis L. Carlson School of Management ranks fifth in annual operating resources, or \$14 million in fiscal 1985-86.

Historically an innovator in forming partnerships with the business community, the school's financial structure reflects this important relationship. More than one-third of the school's operating funds comes from corporate giving and research grants, alumni giving and other unrestricted funds. The balance comes from student tuition and tax dollars.



Uses of funds

The school's use of resources reflects its mission of providing outstanding academic instruction, basic and applied research and public service programs. Approximately two-thirds of the school's resources directly support undergraduate, graduate and post-graduate education and student-related services such as financial aid. Approximately one-fourth supports applied research and public service programs that directly benefit the business community.

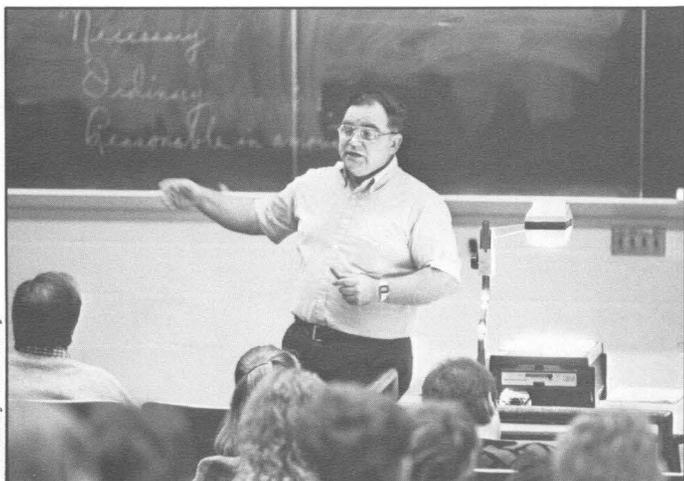
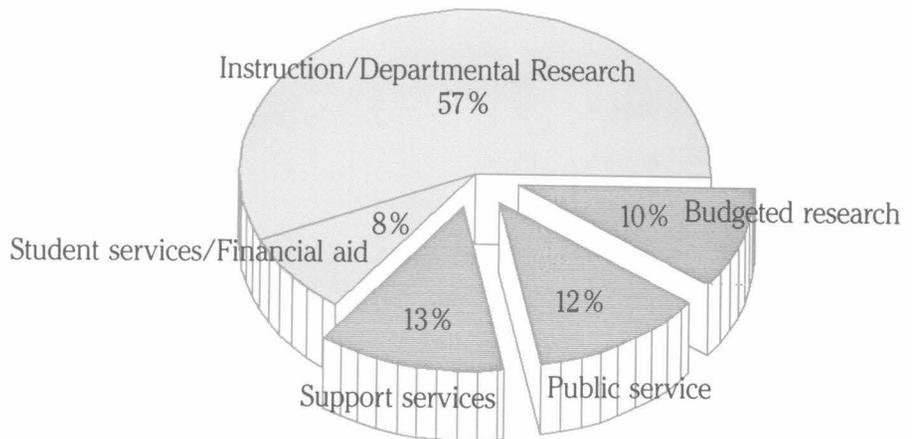


Photo by Tom Foley



Dean's Office

Preston Townley, Dean
Frederick Beier, Associate Dean
Anne M. Benisch, Associate Dean, External Affairs

Academic Program Directors

Norman Chervany, Director, Professional Management Programs (MBA Program and Executive Development Center)
John Fossum, Director, Graduate Program, Industrial Relations
Fred Jacobs, Director, Graduate Studies in Taxation
Paul Johnson, Director, Ph.D. Program
Gerald Rinehart, Director, Undergraduate Studies

Academic Department Chairs

David Dittman, Chairman, Department of Accounting
Timothy Nantell, Chairman, Department of Finance & Insurance
Mario Bognanno, Director and Chairman, Industrial Relations Center and Department
Carl Adams, Chairman, Department of Management Sciences
Michael Houston, Chairman, Department of Marketing & Business Law
Raymond Willis, Chairman, Department of Strategic Management and Organization

Distinguished Chairs and Professors

Gordon Alexander, IDS Professor in Finance & Insurance
Gordon Davis, Honeywell Professor in Management of Information Systems
Richard A. Edwards, Frederick R. Kappel Chair in Business and Government Relations
John Kareken, Banking Chair
Timothy Nantell, Gelco Professor in Finance & Insurance
Shyam Sunder, Honeywell Professor in Accounting
C. Arthur Williams, Insurance Industry Chair
Andrew Van de Ven, 3M Chair in Human Systems Management
Kenneth Roering, The Pillsbury Company-Gerot Chair in Marketing

Board of Overseers

William Hodder, Chairman
Chairman, President and CEO, Donaldson Co., Inc.
Barbara Adams, Chair, First Bank Eagle City
Bruce Allbright, Chairman and CEO, Target Stores
Anthony Andersen, President and CEO, H.B. Fuller Co.
Barbara Armajani, CEO, Pinstripes Petites, Inc.
Curtis Carlson, Chairman of the Board, Carlson Companies, Inc.
Robert Carlson, Chairman, President and CEO, BMC Industries, Inc.
Dennis Cavanaugh, President and CEO, Soo Line Railroad Co.
William Cooper, Chairman and CEO, TCF Banking and Savings, F.A.
Thomas Dale, Chairman and CEO, Dain Bosworth, Inc.
Luella Goldberg, Director, Northwestern National Life Insurance Co.
Harvey Golub, President and CEO, IDS Financial Services, Inc.
Pierson Grieve, Chairman, President and CEO, Ecolab Inc.
N. Bud Grossman, Chairman and CEO, Gelco Corporation
Roger Hale, President and CEO, Tennant Company
Vernon Heath, President, Rosemount, Inc.
Deborah Howell, Executive Editor, St. Paul Pioneer Press and Dispatch
Allen Jacobson, Chairman and CEO, 3M
Lloyd Johnson, Chairman, President and CEO, Norwest Corporation
Geri Joseph, Senior Fellow, Hubert H. Humphrey Institute of Public Affairs
Richard Knowlton, Chairman, President and CEO, Geo. A. Hormel and Co.
Darrell Knudson, Vice Chairman, First Bank System, Inc.
Duane Kullberg, Managing Partner and CEO, Arthur Andersen & Co.
H. William Lurton, Chairman and CEO, Jostens Inc.
Harvey Mackay, Chairman and CEO, Mackay Envelope Company
W. Eugene Mayberry, Chairman, Board of Governors, Mayo Clinic
Donald McCarthy, Chairman and CEO, Northern States Power Co., Inc.
Glen Nelson, Executive Vice President, Medtronic, Inc.
Dale Olseth, President, DAROL Corporation
Charles Oswald, Chairman and CEO, National Computer Systems, Inc.
James Renier, President and COO, Honeywell, Inc.

Richard Schall, Consultant-retired Vice Chairman and CAO, Dayton Hudson Corporation
James Spicola, President and COO, Cargill, Inc.
John Stafford, Chairman, President and CEO, The Pillsbury Co.
Gary Stern, President, Federal Reserve Bank of Minneapolis
John Turner, President, Northwestern National Life Insurance Co.
Mervin Winston, Vice President of Professional Practices, First Bank System, Inc.
C. Angus Wurtele, Chairman and CEO, The Valspar Corporation

"A look at the Curtis L. Carlson School of Management" was prepared by the Office of the Dean, External Affairs Department. The editor was Martha Douglas.

External Affairs Department:
Anne M. Benisch, associate dean, External Affairs
Martha Douglas, director of Communications
Jeanne Katz, director, Alumni and Development
Julie Heupel, director, Corporate Relations
Jan Windmeier, director, Career Planning and Placement

For more information contact the Office of the Dean, Curtis L. Carlson School of Management, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. Telephone: (612) 625-8308.

Carlson School of Management Offices are located in the Management & Economics and Hubert H. Humphrey Center buildings on the University of Minnesota Twin Cities campus.

The University of Minnesota is an equal opportunity educator and employer.

NEW APPOINTMENTS

Shawn P. Curley was hired as an assistant professor in management sciences. He received his doctorate from the University of Michigan.

Martha Douglas, former internal communications specialist with Dayton Hudson Department Store Company, was appointed director of communications for the school.

W. David Kelton was hired as an assistant professor in management sciences. He received his doctorate from the University of Wisconsin.

Mary Lippitt Nichols, associate professor of strategic management and organization, was appointed director of the Strategic Management Research Center.

Rema Padman was hired as an assistant professor in management sciences. She received her doctorate from the University of Texas at Austin.

William P. Scheurer, former manager of Employment and Development at the Minneapolis Star and Tribune Company, was appointed acting director of the Executive Development Center.

Gary Scudder, assistant professor of management sciences, is the 1986-1987 director of the Operations Management Center.

NEW GRANTS

Canadian Certified General Accountants' Research Foundation to **Lane Daley**, assistant professor of accounting, and **Chandra Kanodia**, associate professor of accounting, for their "Experimental Tests of the Value of Communication in Contracts."

National Center for Development Studies, Australian National University, to **Dennis Ahlburg**, assistant professor of industrial relations, to study migration within and from the Pacific.

Woksape to **Gordon Duke**, assistant professor of accounting, and **Shyam Sunder**, professor

of accounting, to develop software for a computerized economics laboratory.

PUBLICATIONS AND ACTIVITIES

Dennis A. Ahlburg, assistant professor of industrial relations: "Why Crime is Down" (with Morton O. Schapiro), *American Demographics*, October 1986.

Gordon Alexander, professor of finance and insurance, attended the Conference on Research in International Finance held at the Centre HEC-ISA (The Hautes Etudes Commerciales - The Institut Supérieur des Affaires) in Jouy-en-Josas, France. He presented "International Listings, Stock Returns, and Capital Market Integration: Theory and Evidence" (with C. Eun and S. Janakiramanan).

Don Cho, assistant professor of finance and insurance, presented "The Impact of Loss Control on the Insurance Decision of a Risk Averter" at the 13th Seminar of the European Group of Risk and Insurance Economists in Hamburg, West Germany. **Cho** also attended the International Conference on Insurance Solvency in Philadelphia and discussed his paper, "Insurer Underwriting Capacity and Policyholder Underwriting Risk."

Lane Daley, assistant professor of accounting: "Evidence on the Relationships Between Earnings and Various Measures of Cash Flows" (with R. Bowen and D. Burgstahler), *The Accounting Review*, October 1986. **Daley** presented "The New Pension Reporting Standard" for the Accounting Principles Committee of the State Society of Certified Public Accountants. He also presented "Accounting for Operating and Capital Leases" at an accounting workshop for small practitioners.

Gordon B. Davis, professor of management sciences and Honeywell Professor of Management Information Systems, was principal investigator (with James C. Brancheau and Tor Larsen) on The St. Paul Companies-funded project, "Managing the Diffusion of End-User Computing."

Tony DeAngelis, coordinator of private sector programs for the labor education service, and **Gene Daniels**, director of private sector programs, taught "Effective Union Leadership" to second-year participants in the Communication Workers of America District #6 Leadership Education Conference in Norman, Okla.

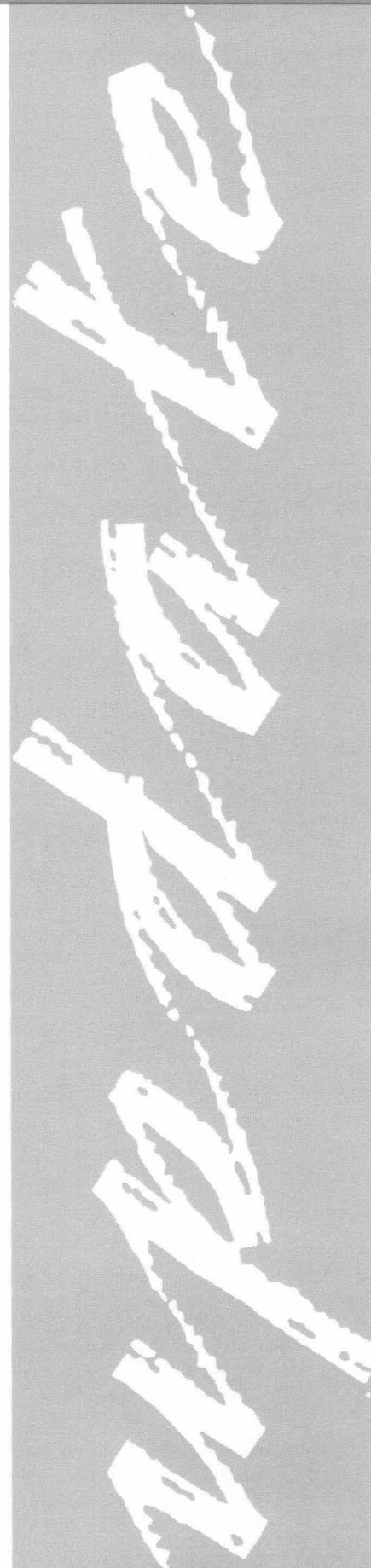
W. Bruce Erickson, professor of strategic management and organization, travelled to the People's Republic of China as part of an academic exchange sponsored by the China Association for Science and Technology.

John Fossum, associate professor of industrial relations, conducted "Integrating Psychological and Economic Theories of Pay" in the Personnel/Human Resources Division Doctoral Consortium at the Academy of Management meetings in Chicago. He and **Richard Arvey**, professor of industrial relations, presented a Division 14 symposium on "Industrial Relations and Industrial/Organizational Psychology" (with Randall Schuler, Paul Banas, Thomas Kochan, and David Lewin) at the American Psychological Association annual meeting in Washington.

Ken Gagala, professor of industrial relations, conducted a one-week course, "Union Power in the Future," at the New York State School of Industrial and Labor Relations, Cornell University, Ithaca, N.Y. **Gagala** presented "What Would John L. Lewis Do Today?" to the organizing staff of the United Mine Workers of America in Louisville, Ky. and taught a one-week "Organizing" course in the Labor Studies College Degree Program offered jointly by Antioch University and the George Meany Center for Labor Studies in Silver Springs, Md. His *Union Organizing and Staying Organized* (Reston, 1983) is now available at American Cultural Centers operated throughout the world by the United States Information Agency.

Thomas R. Hoffmann, professor of management sciences, presented "Value-based Priority Scheduling Rules for Job Shops"

FACULTY UPDATE



(with **Gary Scudder**, assistant professor of management sciences) at the Institute of Management Sciences XXVII International Meeting near Brisbane, Australia. In August he attended a meeting of the American Production and Inventory Control Society's Curriculum and Certification Council in San Francisco.

Charles Manz, assistant professor of strategic management and organization: "Self-Leadership: Toward an Expanded Theory of Self-Influence Processes in Organizations," *Academy of Management Review*, 1986.

Salvatore March, associate professor of management sciences, will present a paper written with Andre Flory to the 5th International Conference on Entry Relationship Approach.

March is on the program committee for the conference.

Ray Noe, assistant professor of industrial relations: "Trainee Attributes and Attitudes: Neglected Influences on Training Effectiveness," *Academy of Management Review*, 10, 1986; "The Influence of Trainee Attitudes on Training Effectiveness: Test of a Model," *Personnel Psychology*, 36(3), 1986.

Peter Ring, associate professor of strategic management and organization, delivered three papers at the Academy of Management's annual meeting in Chicago. **Ring** chaired a roundtable research discussion on transaction cost economics for the Social Issues in Management Division. He served on a panel at the American Business Law Association's annual meeting in Minneapolis in August.

James Scoville, professor of industrial relations, was re-elected chair of the interest group on labor market issues in developing countries at the 7th World Congress of the International Industrial Relations Association held in Hamburg, West Germany.

Shyam Sunder, professor of accounting, is Visiting McClelland Centennial Professor and Visiting Fellow of the Economic Science Laboratory at the University of Arizona-Tucson fall quarter. At the August annual meetings of the American

Accounting Association in New York **Sunder** presented "Market for Information: Experimental Evidence"; "The LIFO Puzzle: Slow Disciplining of Managers in a Rational Expectations Economy" (with **Amin Amershi**, associate professor of accounting); "Optimum Asset Valuation Rules under Price Movement and Measurement Errors: A Linear Aggregation Approach" (with Suk Sig Lim).

Lillian Werner, lecturer in marketing and business law, presented "Franchising: The University Teaching Experience" at the Society of Franchising's first annual meeting for academicians doing research and/or teaching in the franchising field. The meeting was held at the University of Nebraska-Omaha. She is a member of the Academic Advisory Council of the International Center for Franchise Studies, University of Nebraska-Lincoln.

James C. Wetherbe, professor of management sciences and director of Management Information Systems Research Center: "Information Architectures: Methods and Practice" (with James Brancheau), *Information Processing Management*, Vol. 22, No. 6, 1986. **Wetherbe** was keynote speaker at the 40th Anniversary Party of the Data Processing Management Association (DPMA) chapter meeting. His presentation was "Computers & Information Systems: Past, Present, & Future."

Andrew F. Whitman, professor of finance and insurance, presented "Self Insuring the Public Liability Risk" before the Minnesota Public Financial Officers meeting, "Public Officers and Professional Liability Insurance" before the LeSeuer County Board, "Tax Reduction Considerations Before Year End" to the Minnesota Association of Chartered Life Underwriters and "How The New Tax Law Affects Your Pocketbook" to the Valley Community Church Endowment Committee.

C. Arthur Williams, Jr., professor of finance and insurance: "Workmen's Accidents Compensation Insurance: Japan's Lesser Known Social Insurance Scheme," *Keio Business Review*, No. 22-5, 1985. Williams delivered "Workers' Compensation

Benefits During Retirement Years: Their Proper and Present Roles" (with Peter Young) at the American Risk and Insurance Association's annual meeting in Chicago.

Mahmood Zaidi, professor of industrial relations and director of international program development, presented two papers at the 7th World Congress of the International Industrial Relations Association in Hamburg, West Germany.

Faculty and Ph.D. students in the Department of Strategic Management and Organization were active participants at the National Academy of Management Conference in Chicago in August. Papers presented included the following: **Jeanne Buckeye, Roger Hudson, Andrew Van de Ven and S. Venkataraman**, "A Process Model of Small Business Failure"; **Janet Dukerich**, "Causal Analysis in Managerial Decision Making"; **Raghu Garud**, "Processes in the Emergence of Industries"; **Todd Hostager** (with John Bryson), "Poetics and Strategic Management: Interpreting Social Constructions of Reality"; **Michele Govekar, Carol Jacobson, Stefanie Lenway and Peter Ring**, "The Impact of Economic Statecraft of Transactions: Williamson Revisited"; **Roger Hudson and Hal Angle**, "The Minnesota Innovation Research Program: Collective Action in an Individualist Culture"; **Ian Maitland**, "Efficiency, Power and the Hazards of Governance"; **Charles Manz**, "Dwight D. Eisenhower: A Case Study of a Super Leader"; **Mary Nichols, Janet Dukerich and William Roering**, "A Theory of Managing the Scope of an Issue"; **Mary Nichols, Janet Dukerich and Dawn Elm**, "Moral Reasoning in Groups"; **Alfred Marcus**, "Externally-Imposed Innovation: Response Patterns in the Nuclear Industry"; **Douglas Polley**, "Processes for Tracking the Development of Innovations"; **Peter Ring and Roger Hudson**, "Processes in the Development of Joint Ventures"; **Peter Ring and Gordon Rands**, "Outcomes of Programmatic Longitudinal Research: Some Preliminary Observations

from the Minnesota Innovation Research Program"; **William Roering**, "The Practical Application of Creativity and Innovation in Management"; and **Andrew Van de Ven**, "An Overview of Innovation Process Models and Methods."

R. Edward Freeman was overall coordinator of the Social Issues in Management Doctoral Consortium; **Freeman, Stefanie Lenway and Ian Maitland** presented papers. **Lenway** also chaired two other conference sessions, **Andrew Van de Ven** headed a symposium on innovation and **Hal Angle and Alfred Marcus** served as discussants in sessions.

The Strategic Management Research Center assisted in many of the research projects which led to 11 of the above papers. Most are available or soon to be published in the SMRC Discussion Paper Series. Several Associates of SMRC also contributed to the conference, including John Bryson, Humphrey Institute of Public Affairs; Paul Reynolds, Sociology; M. Scott Poole and David Bastien, Speech Communications.

VISITING FACULTY

Gougang Chen, from Xiamen University, Xiamen, Fujian, People's Republic of China, is a visiting lecturer in the accounting department.

Lawrence Glosten, from Northwestern University, is a visiting assistant professor in the finance and insurance department.

Ravi Jagannathan, from Northwestern University, is a visiting assistant professor in the finance and insurance department.

Sung-han Suh, from Kyung Hee University, Seoul, Korea, is a visiting professor in the industrial relations and marketing and business law departments for the 1986-1987 academic year.

Yu Qing-Ling, from Shanghai University of Finance & Economics, is the first visitor under the school's exchange program. The host department for the 1986-1987 year is management sciences.

1920-1929

Kenneth O. Newhouse, '28, died in 1984. He lived in Laguna Hills, Calif.

1940-1949

Richard M. Cyert, '43, was awarded the Dow Jones Award at the 1986 Annual Meeting of the American Assembly of Collegiate Schools of Business. Cyert, since 1972 president of Carnegie-Mellon University, was recognized for the profound impact of his career as a scholar and administrator and for his outstanding contributions and distinguished service to management education. The Dow Jones Award reflects efforts to effectively utilize computers in education and management generally. The award carries a \$10,000 grant for student financial aid at Carnegie-Mellon.

1950-1959

Gerhardt P. Kirchmann, '51, has been elected by the board of directors of International Multifoods to the position of vice president and controller of the company. Kirchmann, who joined the company in 1956, is the corporation's chief accounting and control officer responsible for financial reporting, internal auditing and Multifoods' annual financial plans.

James E. Roberts, '55, retired as controller of International Petroleum (Columbia Ltd.) a division of Exxon Corp. in Bogota, Colombia.

1960-1969

James R. Campbell, '64, is president and CEO of Norwest Bank Minneapolis, N.A.

Robert P. Bowles, '67 MBA, is vice president of the Israel Discount Bank of New York, New York City.

Richard L. Larson, '68 MBA, is president of Towncrest Management Inc., a property management company, Minnetonka Beach, Minn.

Peter E. Lohaus, '68 MBA, is vice president of sales in the structural ceramics division of Coors Ceramics, Golden, Colo.

He became a U.S. citizen in 1984.

1970-1979

C. David Jones, '70 MBA, is vice president for marketing with the Minnesota North Stars hockey team, Bloomington, Minn.

Kent C. Rebek, '70, is vice president at North Star Risk Services Inc., Minneapolis.

Daniel Buivid, '71, is Minnesota Resident Attorney for Liberty Mutual Insurance, Minneapolis.

James W. Gleisner, '71 MBA, is a field agent with the Knights of Columbus in Burke, Va.

Rudolph F. Lauermann, '71 MBA, is director of acquisitions and business development for 3M, St. Paul.

Michael J. Doty, '72, is director of internal audit for Reckitt & Colman, N.A., Rochester, N.Y.

Thomas J. Kopacek, '73, is an account executive with Republic Acceptance Corp., Minneapolis. He is also the president of Farm House International Fraternity.

James R. Appleby, Jr., '74 MBA, is vice president, finance and administration, with MG Industries, Valley Forge, Pa.

David R. Fischer, '74 MBA, is manager, international transportation and customs, for Chrysler Motors in Detroit, Mich.

Stephan C. Anderson, '75 MBA, is the owner of Power Technology, Winter Park, Fla.

Stephen M. Carr, '75, is SNAP II technical coordinator in the Navy management systems support office at the Naval Air Station in Norfolk, Va. In September 1985 he received his masters of science degree in information systems from the Naval Post Graduate School in Monterey, Calif. and in May 1986 he married Debra Wallgren of St. Paul.

Rex S. Toh, '75 Ph.D., is a professor at the School of Business, Seattle University, Seattle, Wash.

David A. Wildmo, '76 MBA, is owner and president of Wildfire Sports, St. Paul.

Scott D. Prueter, '77 MBA, is marketing manager for Target Tech Inc., Seattle, Wash.

Aimee Fitzgerald, '75 MBA, is president of Fagan Business Communications, a marketing and public relations firm in Aurora, Colo.

Stephen A. Segal, '79 MBA, is a self-employed computer consultant in Minneapolis.

John L. Shannon, '79 MBA, was recently appointed president and managing partner of Thresh-old Ventures Inc., Minneapolis.

Roger B. Winship, '79 MBA, is vice president of The Chicago Corp., Chicago.

1980

Lea Mitchell Fritsch, '80 MBA, is assistant director of finance for the city of Boulder, Colo.

Keith A. Meyer, '80, is manager of administration for Planmark, Eden Prairie, Minn. He and Jillayne Griep were married in August 1986 in Burnsville, Minn.

Brad G. Pfahning, '80, is western region sales manager for Gemini Inc., Cannon Falls, Minn.

1981

Terri Barreiro, '81 MBA, is director of planning, allocations and evaluation for the United Way in Minneapolis. She has also been elected president of the National Nonprofit Management Association, a group dedicated to improving management of nonprofit organizations.

T. Craig Britton, '81 MBA, is a senior marketing manager at Pillsbury, Minneapolis.

William C. Brown, '81 MBA, is the controller at Molecular Genetics, Minnetonka, Minn.

Jay P. Carstenbrock, '81 MBA, is manager, national accounts and supply operations, for Standard Oil Chemical Co., Cleveland, Ohio. He and his wife have two daughters, Molly, 2 and Megan, 4 months.

Joe Gerber, '81 MBA, is a real estate officer with First Bank, St. Paul.

Patricia Napoli McFarlane, '81 MAIR, is a human resources representative with Honeywell, Minneapolis.

William H. Pearson, '81 MBA, was promoted to director of strategic planning in charge of all acquisitions and portfolio planning for NewVector Group, a subsidiary of U.S. West. He is headquartered in Bellevue, Wash.

Judith Stearns Rutscher, '81 MBA, is manager, general accounting, for Northern Ordnance Division, FMC, Minneapolis.

Charles E. Schneider, '81, is a staff accountant with Laventhol & Horwath, Tampa, Fla.

Stephanie Cummings Soskin, '81 MBA, is an account executive with BBDO Advertising, Minneapolis.

1982

Carl G. Anderson, '82, is a senior pricing analyst with Sperry Corp., Defense Computer Systems, Eagan, Minn.

Dean Anderson, '82 MBA, married **Dorette Hemeker**, also '82 MBA, in 1985. Dean is director of creative communications with Stu Gang & Associates Inc., Advertising and Public Relations, St. Paul. Dorette is a project analyst with Cray Research, Minneapolis.

L. Ronald Batcheller, '82 MBA, is associate director of the pharmacy at Abbott/Northwestern Hospital, Minneapolis.

Tina Bonetti, '82 MBA, is director of corporate communications with Cray Research, Minneapolis.

William C. Bonetti, '82 MBA, is a consultant with Control Data Corp., Minneapolis.

Paul R. Carlson, '82 MBA, is a marketing analyst with Minnesota Title, Minneapolis.

Peter M. Gill, '82 MBA, is a corporate finance associate with Piper Jaffray & Hopwood, Minneapolis.

Arthur J. Hart, '82, is EDP auditor, establishing EDP audit functions for Terra International and all other subsidiaries of its parent company, Inspiration

Resources Corp. He is located in Sioux City, Iowa.

James C. Hedtke, '82 MBA, was promoted to director of marketing for Nuclear Energy Services (NES), Danbury Conn., responsible for the foreign and domestic sales and marketing of NES products and services that primarily support nuclear plant maintenance and upgrade and reduce radiation exposure. Jim, his wife and two children live in New Fairfield, Conn.

Gregory Heetland, '82 MBA, just accepted a two-year assignment with IBM in Norwalk, Conn. He and his wife had a baby girl, Emily Elise, in June.

Sirkka Jarvenpaa, '82 MBA, is an assistant professor at the University of Texas at Austin's management science and information systems department.

Michael Kasprick, '82 MBA, is an associate marketing manager with Pillsbury, Minneapolis.

Walter C. Larsen, '82 MBA, is an account executive/marketing strategist with Richard Scales Advertising, St. Paul.

Ross Levin, '82, opened Ross Levin Financial Group in March 1986. In July he was appointed president of the Twin Cities Association of Financial Planners, an organization with more than 500 members that focuses on education, legislation and community involvement.

Freda C. Marver, '82 MBA, freelances in marketing research. She has a two-year-old daughter.

Bob J. Nechal, '82 MBA, was promoted in March to director of corporate systems for Land O'Lakes, Arden Hills, Minn.

Blake J. Omlie, '82, is an investment banker in the public finance department of Dain Bosworth Inc., Minneapolis.

Mark W. Philipsen, '82 MBA, was recently promoted to manager of the Hewitt Associates, Phoenix, Ariz.

Ann M. Ring, '82 MBA, is operations director for Garsten Management Corp., St. Paul.

Stewart Stender, '82 MBA, is now a partner with Trammell Crow Co., Bloomington, Minn.

Elizabeth Trach, '82 MBA, is an advertising and marketing manager with IDS, Minneapolis.

Mary P. Williams, '82 MBA, is a computer science instructor with Normandale Community College, Bloomington, Minn.

1983

Philip L. Bergman, '83 MBA, is a systems analyst with the Federal Reserve Bank of St. Louis, Mo.

Richard L. Breitman, '83, formed his own law firm in May and limits his practice to immigration law.

Haewon Chung, '83 MBA, is manager of Citibank, N.A., Seoul, Korea.

Anthony B. Cyplik, '83 MBA, is manager, SNA Products for Stratus Computer Inc. He lives in Phoenix, Ariz.

Kenneth Dzugan, '83 MBA, is chief financial officer for Spartan Properties, St. Paul.

Diane M. Emerson, '83 MBA, is manager, corporate market research, for H.B. Fuller Co., St. Paul.

Scott T. Harstad, '83 MBA, is a financial analyst with CPT Corp., Minneapolis.

Debra Heinzl, '83 MBA, started in May, 1986 as a senior systems analyst with Imperial Inc. in Green Bay, Wis., and was recently promoted to training director.

Jeff Hickman, '83 MBA, is now with NBD Northwest Bank of Traverse City, Mich.

Michael J. McFarlane, '83, is a systems analyst with Cargill Inc. in Minnetonka, Minn.

Scott D. Opsal, '83 MBA, is an associate senior securities analyst with Value Investors Inc., Des Moines, Iowa. The Institute of Chartered Financial Analysts of Charlottesville, Va, recently designated him a chartered financial analyst.

Lindsay Shorter, '83 MBA, is with special projects of Mayo Medical Ventures, an affiliate of the Mayo Clinic, Rochester, Minn.

Michael J. Solender, '83 MAIR, is area human resources

manager for Pepsico - Taco Bell Division, Santa Ana, Calif.

1984

Christine Anderson, '84 MBA, is project director for Market Trends Inc., Minnetonka, Minn.

Anne Obert Derfler, '84 MBA, married David Derfler at St. Leo's Church in St. Paul in June. She also was promoted to senior financial analyst with Harris Semiconducts, Melbourne, Fla.

Miki Dzugan, '84 MBA, is president of PFG Associates Inc., St. Paul.

Lynn Ehlers, '84 MBA, is vice president of finance for Arrow Moving and Storage and Minneapolis Van and Warehouse Company.

Thomas Fidler, '84 MBA, is a systems project leader for UFE Inc., Stillwater, Minn., where he is installing an MRP II system. At home he is busy chasing his one-year-old son.

James D. Ingebrand, '84 MBA, is a market development supervisor for 3M, St. Paul.

Kevin McCarthy, '84 MBA, is a transportation operations analyst with Target, Minneapolis. Also, he and Cindie Prust, '84 MBA, plan on marrying in April.

Kristi McNamara, '84 MBA, is a senior financial analyst with Northern Telecom Inc, Richardson, Texas.

Dean R. Mitchell, '84 MBA, is a project leader with Burroughs Corp., Detroit, Mich.

K.K. Rajeevan, '84 MBA, is an independent MIS consultant working with Honeywell's corporate information management department, Minneapolis.

John Rantala, '84 MBA, is the owner of Wooden Boat Parts, Minneapolis.

Paul Runice, '84 MBA, is an acquisitions analyst with Pillsbury, Minneapolis.

Susan Showalter, '84 MBA, is a center associate with the Center for Policy Studies in Minneapolis.

John R. Speltz, '84 MBA, is president of Speltz Inc., Albert Lea, Minn.

James H. Sleezer, '84 MBA, is assistant director, administration and finance, University of Minnesota Landscape Arboretum, Chanhassen, Minn.

Chuck Tatsuda, '84 MBA, is a commercial banking representative with First Bank St. Paul.

Susan J. Wheeler, '84 MBA, is a commercial banking officer with First Bank St. Paul.

1985

Elizabeth M. Abt, '85 MBA, is a systems consultant with Arthur Andersen and Co., Minneapolis.

Michael Bromelkamp, '85 MBA, is corporate controller with I.C. System Inc., St. Paul.

Julie Davis, '85 MBA, is a project director of Maritz Market Research of Minneapolis. She moved to a new home in Chanhassen, Minn. and served as an advisor to an MBA team conducting research for the Dale Warland Singers.

Peggy Fort, '85 MBA, was recently promoted to associate marketing manager in the prepared dough products division at Pillsbury, Minneapolis. She also has plans to marry Lance Zimmerman in 1987.

David Homyak, '85 MBA, is manager, telecommunications and computer operations, for MSI Insurance, Arden Hills, Minn. In 1986 he became a fellow of the Life Management Institute and Certified Life Underwriter.

Leon Kraig, '85 MBA, is R & D product manager for M & M/Mars, Hackettstown, N.J. He and his wife Susana have a one-year-old daughter Jessica.

Stuart P. Levin, '85 MBA, is insurance industry marketing manager for Tandem Computers Inc., Cupertino, Calif.

Ronald Mackowski, '85 MBA, is a systems analyst with the Burroughs Corp., Detroit, Mich.

Harriet K. Meetz, '85 MBA, is a visiting assistant professor at the University of California, Los Angeles.

Michael K. Murtaugh, '85, is an advertising representative with the Albert Lea Evening Tribune, Albert Lea, Minn.

John Nicolay, '85 MBA, is general manager of MicroAge Computer Stores, Bloomington, Minn.

Rosemarie Orehek, '85 MBA, is marketing engineer with Northwestern Bell, Minneapolis.

Sangchan Park, '85 MBA, is a research assistant at the University of Illinois, Champaign, Ill.

William Poppert, '85 MBA, is a financial analyst with Carlson Companies, Minneapolis.

Bill Rodriguez, '85 MBA, is director of marketing and corporate memberships for Medalist Sports Clubs of Minneapolis. In August he married Lorraine Aldana of Minneapolis.

Roger H. Rose, '85 MBA, is a staff member at the Los Alamos National Laboratory in Los Alamos, N.M.

Jane Roettger Taffe, '85 MBA, is a marketing research assistant with General Mills, Minneapolis.

Tom Whaley, '85 MBA, is a product planner, responsible for developing new product definitions, providing services to other divisions and supporting merger and acquisition analysis in Rosemount's new business development group, Eden Prairie, Minn.

1986

Finn Aamont, '86 MBA, is a member of the consulting staff with Arthur Andersen and Co., Minneapolis, for 12 months before he returns to Norway.

Leonard P. Austin, '86 MBA, is an information analyst with Norwest Bank - Minneapolis.

Steven L. Becker, '86 MBA, is a life insurance sales manager

ALUMNI UPDATE

Let your classmates know what you've been doing that's new or exciting. Use this form to share information about your career, awards, family, trips, mini-reunions, etc. Photos are welcome as well. We'll include your news in the "Alumni Update" section of the next *Minnesota Management Review*.

Please also use this form if you have a change of business or home address. Send it to: Jeanne Katz, director, Alumni and Development, Curtis L. Carlson School of Management, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455.

Name _____ Date _____
first middle or maiden last

Year of graduation and degree(s) granted from the School of Management _____

Employer _____ Home _____
position mailing address
company/organization city, state, zip
city, state, zip
phone

Information you would like to share:

with Northwestern National Life Insurance Co., Minneapolis.

William J. Caldwell, '86, is an auditor with the Army audit agency in Washington, D.C. He lives in Springfield, Va.

Joan R. Coffee, '86 MBA, is business office administrator for Control Data, Bloomington, Minn.

David C. Ewald, '86 MBA, is governmental relations consultant with Ewald Consulting Group, St. Paul.

JoAnn E. Frekot, '86 MBA, is a market support representative with IBM, Eden Prairie, Minn.

Susan K. Geiser, '86 MBA, is a research associate with Walker Research, Indianapolis, Ind.

Gregg A. Gittus, '86 MBA, is a systems analyst with Eli Lilly & Co., Indianapolis, Ind.

Mark D. Holman, '86 MBA, is accounting manager with National Computer Systems, Minneapolis.

Joni E. Jallo, '86 MBA, is a corporate banking associate, metropolitan division—corporate bank training division of First Banks, Minneapolis.

Pamela L. Jamison, '86 MBA, is a merchandising analyst with Fingerhut Corp., Minnetonka, Minn.

Kate Kelly, '86 MBA, is a commercial lending trainee with First Banks, Minneapolis.

Sarah F. Leaver, '86 MBA, is a field marketing manager in the Denver district sales office of the Ford Motor Co.; she lives in Aurora, Colo.

Daniel Marcotte, '86 MBA, is a consultant with Peat, Marwick, Mitchell & Co., Minneapolis.

Monica A. McNaughton, '86 MBA, is a loan officer trainee with the National Bank of Detroit, Detroit, Mich.

John D. Moody, '86 MBA, is a CPG with McMaster - Carr Supply Co., Elmhurst, Ill.

Kent Morris, '86 MBA, is an associate systems and procedures analyst with IBM in Kingston, N.Y.

Keith H. Pedersen, '86 MBA, is supervisor - real estate with AT&T, Chicago.

Michael Sabbann, '86 MBA, is an analyst with Piper Jaffray & Hopwood, Minneapolis.

Darla Tufto, '86 MBA, is a marketing assistant with Land O'Lakes, Minneapolis.

Donna Matthew Vandeharr, '86 MBA, is a health administrator with UFE Inc., Stillwater, Minn.

Mark J. Vieno, '86 MBA, is an account executive with Kidder Peabody & Co., Minneapolis.

Lynn VonKorff, '86 MBA, is finance development director for the Playwrights Center, Minneapolis.

Hirokazu Yuihama, '86 MBA, is in the International Business Section of Yamsichi Securities Ltd., Tokyo, Japan.

Minnesota Management Review

Curtis L. Carlson School of Management
University of Minnesota
271 19th Ave. S.
Minneapolis, MN 55455

ADDRESS CORRECTION REQUESTED

Nonprofit Org.
U.S. Postage
PAID
Minneapolis, MN
Permit No. 155

000030841 0 04 2
UNIVERSITY ARCHIVES
UNIV OF MINN, 10 WA LIB
117 PLEASANT ST S E
MINNEAPOLIS, MN 55455