I. INTRODUCTION

One of my activities is serving as chairman of the Board of Visitors at Duke University’s Fuqua School of Business. Each semester a committee of the Board meets with student representatives to discuss, among other things, how the Fuqua School can be improved.

At a recent meeting, students voiced concern that the School was not doing enough to help MBAs prepare for and obtain jobs with small-to-medium-sized companies. This particular interest in small companies was surprising to the board members. Why? To say the least, that was not a traditional concern of MBA students. After all, the large financial institutions, consulting firms and Fortune 500 companies are the principal recruiters as well as the highest payers of MBA’s. The students also understood that this orientation of the School’s placement office (as well as the School in general) is a natural one. Fortune 500 companies are the primary supporters of business schools through research projects, donations and other partnerships. So, naturally, business schools are oriented toward big business.

But these days more and more students are interested in careers with small-to-medium-sized companies. Why?
Mid-size companies have always offered people the opportunity for broader responsibilities. Where they couldn't compete with larger companies was the compensation and the degree of security they offered. But that's changed dramatically. Let's face it, there's no security in big companies any more. So now the question is more: why should MBAs put up with the bureaucracy, the huge size and limited scope of responsibility they would hang in a large corporation?

This little episode just reinforced for me a long-held belief about the importance of an economic structure and climate that fosters strength and growth in mid-size and smaller companies. They are the backbone for our economy and our main hope for the future.

As far as big companies go, hardly a week goes by when there isn't a story that mentions the words "restructure" and "downsize".

As recently as the early 1960's neither word was listed in Webster's dictionary. By 1985 both words were listed, with "downsize" defined this way: "To make in a smaller size...downsize automobiles."

Now, instead of automobiles, a far more likely example would be corporations. And the definition might read: "To narrow the focus of an organization's activity. To attempt to be more competitive by being smaller, more flexible and incurring less overhead."

There's every indication that the surge in downsizing of the 1980's will continue. This past July, the consulting firm of Temple, Barker and Sloane predicted that one in three U.S. companies would downsize or restructure every year for the next five years.
Three years ago it was estimated that downsizing and restructuring had eliminated approximately 1.5 million professional and managerial positions at U.S. companies over the previous 10 years. Obviously, that figure has increased substantially and will rise even higher as U.S. corporations continue to downsize.

In a recent article on IBM, Fortune magazine refers to "the chaos of today's computer industry." While I agree that "chaos" is particularly rampant in the computer industry, that business is by no means an "isolated island" of chaos.

Executives of Chrysler, General Motors, Ford and Honda would, I expect, hardly describe their world as one of idyllic calm.

No wonder the students at Fuqua don't find the career opportunities at Fortune 500 companies all that enticing. No wonder they are finding mid-size and smaller companies more attractive.

II. STRENGTHENING THE ECONOMY

Let me talk for a moment about strengthening the economy, but smaller companies in particular. At the most basic level we need only consider four things--technology, marketing, financing and people. People are actually an integral part of the other three. Without knowledgeable, trained, skilled people nothing happens -- actually that's not true. What occurs is chaos. That's why restructure and reform of the education system is the most important item on our national agenda. It's why as CEO of Control Data I had education reform at the top of the company's public policy agenda, and why today I devote a quarter of my personal time to it. But it's not my topic today. I really want to say a few things about technology, marketing and financing.
Let’s take technology first. The focus of most government policy is on technology “push”. What I mean by that is fostering research -- the development of pools of know-how that will hopefully flow out -- psh out -- into the economy. But a vigorous economy needs technology “pull“ as well. Standard economic theory has it that that “pull” is provided by money -- incentives to the would-be entrepreneur and pools of available financing. That certainly is true, or it is at least a necessary condition. But it is no longer sufficient. The range of technology available for innovation is enormous. But it is much more diffuse, most important is much more complex. So additional pull mechanisms are needed. We can’t just say, “Go to it lads. Your fortune awaits!” It requires innovative government policies and innovative private sector organizations. Such as Rho Delta. Rho Delta may not be unique, but I am unaware of anything else quite like it. Right here in Mankato we may have one of the most important experiments in economic development anywhere in the world.

Applying basic science -- proving product feasibility in an organized, disciplined way is something that is generally perceived as being limited to big companies. But Rho Delta is proving that it can be done in a new and actually much more economically efficient fashion.

I mentioned technological complexity. That has cost implications which make technological cooperation a necessity. This is true not just at the mega project level, e.g. super conductor, super collider, space programs, computer technology, bio-engineering, etc. It is required up and down the spectrum of enterprise size. Of course this is nothing new for small businesses who, because of resource limitations, have always had to engage in technological cooperation.
III. TECHNOLOGY, MARKETS AND THE SOVIET UNION

Let's talk markets and marketing for a minute. Actually, I could go on all day about that, but I really just want to comment on a new market opportunity that's a little different. Well, maybe a lot different ......

Last week I was in Tokyo to participate in a panel discussion of how the private sector of industrialized countries can best participate and assist in the economic reconstruction of the republics of former Soviet Union.

[Discussion of conference: nature of attendees, themes: gov't assistance and policy, market opportunity, political risk, macro-economic risks (e.g. currency), micro-economic risks (e.g. no markets or skilled mgmt.), normal business risks].

[My message - Why small business may have the best opportunity: flexibility, fractionated state of the economy, example of the “networking” company (OM Group) (Oluf Stenhammer). The opportunity for technology transfer from the Soviet Union.]

IV. FINANCING

If technological collaboration is an important need of smaller companies, the biggest need by far is financing. Sales and financing is all most small entrepreneurs have time to worry about.
This is where people like you here today are so important. Nothing happens without the money and especially the early stage money that supports small companies and encourages new business ventures which are so vital to America's economic future.

But it also means more collaborative alliances between small and large companies. And it means we need government policies and social values that foster a different environment than the instant gratification syndrome that is so pervasive today. That's a really big subject which I won't try to deal with. No one has the answers anyway. The problem is we don't even have a good process for trying to determine the answers. The political process is demonstrably deficient. But enough of that.

IV. SMALL BUSINESS -- THE FUTURE

Let me close with a thought about why what's going on here in Mankato is so exciting. Let me start by putting my thought in somewhat academic terms:

Economic development takes place most rapidly and vigorously at points of discontinuity in a society's communication systems.
Historically that meant at points of interruption in travel. In that sense, "stop over" may be a better word than "discontinuity". The most obvious example is the economic activity which developed around seaports -- where a switch from water to land transportation was necessary. All kinds of businesses grew up around seaports. Similarly, villages and trading posts developed at the confluence of rivers, at major river portages and so on. The confluence of the Minnesota and Blue Earth rivers resulted in the establishment of Mankato, for example. Waterfalls at portages also served the economic purpose of providing energy for mills. Thus, Minneapolis was born at the St. Anthony Falls of the Mississippi River.

And so exactly is it with regard to information. Universities are sources of information "power" just as waterfalls are sources of kinetic energy. Silicon Valley, Route 128, or the electronics or bio-medical industries of Minneapolis-St. Paul are not accidents. They are the natural result of the major "stop over" points of information which are a result of the large universities in those locations.

The greatest single change that computer and communications technology can make in the next quarter century is its ability to create -- at any location -- such focal points or "stop over" points in information flow.
A major change in information storage has come about with so-called optical or "laser" disks. The equivalent of the whole MIT engineering library can be put on a few disks that can be accessed by a computer on my desk. Actually even that isn't necessary because by means of computers coupled with communications, I can have meaningful access to any information on any subject almost anywhere in the world. Let me give you an example of what this can mean.

About 60 miles south of Mankato is Bricelyn, Minnesota. Until the 1980's, it was a bustling, small rural town providing goods and services to local farmers. By 1985, with the decline in farms, Bricelyn was on the all too familiar path in rural America to extinction.

But one person had an idea to develop food products made from a grain called amaranth. With the help of small grants from the McKnight Foundation and the State of Minnesota, in 1987 this individual established the not-for-profit "Institute for the Development of Amaranth Products" in Bricelyn, Minnesota -- population 470. Soon there was a network of agriculturists, food technologists, and people with processing know-how: for example, a professor at Iowa State University, researchers at Rodale in Pennsylvania, a retired food processing technologist in Minneapolis, a farmer in Kansas and interested people in New Zealand, Australia, Japan and Europe.

Knowledge flowed into and out of Bricelyn, just as surely as ships sail into and out of Singapore, New York or London.
By January of 1988, (by the way with the help of ____________), the first small company was formed. It opened up shop in a small, boarded-up store which the town's last jeweler had closed four years earlier. By May, it had its first contract; by September, its first profit. And, it has created jobs not only in Bricelyn, but in other Minnesota towns and cities -- Wells, Albert Lea and the Twin Cities.

This ability to create small centers of knowledge in Bricelyn or Mankato -- in fact, anywhere in America -- through the use of computers and communications has tremendous significance for potential investors in new business. [Talk about start up costs, social structure, what small communities mean in terms of stability. Example: Ombudsman Story]

IV. CONCLUSION

The computer age has changed from one where only a few select people and large corporations could participate to one that is open to everybody in every sized city. The "computer age" has become the "information age". And, the new wave of entrepreneurship will be built around information management.

Rho Delta is committed to taking new, innovative ideas and developing them into profitable business ventures that will benefit the people of southern Minnesota.

Also essential to Rho Delta's success, however, is the financing of these ideas.
So people like yourselves are critical in shaping the future of this area. The opportunities for small business are greater than they have been in many years. And with more bright, young college students leaning toward careers in small business, the people part of the equation is better than in a long time. So the future for investors is promising.

In fact, the structure of the workplace is changing so dramatically that Charles Handy, author of *The Age of Unreason*, worries that the most exciting people will never join large corporations and that these companies will be run by the second rate.

So, I am pleased to be a part of an organization such as Rho Delta. I am excited by the opportunities that lie ahead for entrepreneurs. And I am confident that you as potential investors will find these opportunities equally exciting and rewarding.

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