The field of research is one of the more exciting fields because essentially it's a quest for knowledge. From the beginning of time that quest for knowledge has been the key ingredient to drive man to progress as a civilized individual, and our society as a civilized society. What drove any society was the rate of the exchange of ideas and the resulting accumulation of knowledge.

Originally, the process was very slow, following trade routes. When we look at early Greece or Rome, the fall of Rome, or the Dark Ages, we realize that when man was on the move and moving up, there was a direct parallel to the exchange of ideas through trade. A slow down in the exchange of ideas brought about by the state or church really stagnated man. Man advanced with the development of city states in Italy and the beginning of trade and commerce when the exchange of ideas and the assimilation of those ideas began to be reflected in the marketplace and in society. Really, this was productivity, the progression of productivity, in the very broadest sense. Today, this rate of exchange of knowledge and information is accelerating at a tremendous rate, presenting all kinds of opportunities, as well as challenges.

We read current authors' views on change in society today, from Tofler's Third Wave to McLuhan's Global Village. We all have to agree that this rapid rate of change is the greatest challenge we face. Tofler discussed the great periods of change in our society, the agricultural revolution, the industrial revolution, and of course, by his terminology, the electronic revolution, driven by our current computer processing capability. This access to knowledge and information is accelerating at a tremendous rate. It's exciting because it gives us such a wealth of data, but there lies a challenge for us all.

I feel the role of research is to supply management with this knowledge and information in a timely, accurate, and concise manner. With this data, management can make intelligent decisions about where we are and where we are going.

I'd like to use Malone & Hyde as an example and start with a micro-view of our research activity and follow it through some of our various distribution functions. We have the hard and soft savings from the various research programs. While there are many aspects to productivity, tonight I want to concentrate on the soft savings that can be derived.

During the industrial revolution, the biggest gains came from improvement in the hardware, the manufacturing plant, the machine that drove faster or produced more widgets than its predecessor. Yes, there were soft savings, but in general, the benefits were hard savings.
Today, with the computer and its wealth of information available, yes, we do have hard savings, but the real significance is in the soft savings. With scanning, initially you can save the price marking, and maybe you can scan a little faster. However, the real opportunity is in the information you’ve gathered and your ability to put that information in a form which permits you to understand what you could never fully understand before. At an affordable price, we can crunch numbers at an incredible rate. We can spend more time doing what we are best equipped to do, and what we should do, use the intuitive side of our brains, the judgment factor, to bring forward a much greater knowledge than ever before in our history.

At Malone & Hyde, this process begins with research. We, like most companies, start with strategic planning. Our one year plan and our five year plan form a base where our research really begins. In the retail business, the complexity is so great there’s no way to devise a sensible approach to who we are and what we’re doing without copious research. We begin at the divisional level. Through research we define the market and start our planning by determining what our market is, how do we compete, how does the consumer view us, who are the competitors, what is our market share, and what are our strengths and weaknesses vis-a-vis competitors.

Most of you are aware of the analog system of site selection and market share assessment. The wealth of data that has been built up over the last twenty years gives us unbelievable accuracy about what we’re doing and what the competition is doing. We start from a very detailed plan of our strengths in the marketplace to decide where we are going this year, and where we are going to be in five years. We end up producing a set of numbers that suggest a direction and a trend. It’s not like when I was first in the business. Our predecessors were driven by this is the way we’ve been doing it, or this is my gut feel, or this has worked in the past. With research, all of a sudden we’re standing naked, as it would be, before the consumer, because we have our consumer studies, our site selection, studies, etc. that objective analysis is a very, very healthy process.

With the rate of change over the past 5-10 years, and all the unexpected events that have taken place, I have become very skeptical of five year numbers. The numbers are suspect beyond year one, two, or three, certainly beyond three. But, this is secondary. The most important thing is that with a core of data, we’re teaching our managers at all levels how to think about the marketplace. If we educate them in that respect, it doesn't matter if circumstances change. They are equipped to change as circumstances change to respond to the marketplace. The important thing is learning the process. Research is a vital ingredient to painting the picture and structuring plans and objectives accordingly.

Moving on to some of the more applied and day-to-day operations, some of the same principles apply. We have these elaborate buying system models and can crunch all these numbers about velocities of items, and anticipated velocities, you name it. The machine is crunching numbers faster to do a lot of the calculations for us. To me, the most important thing to result from this computing power is that it takes a lot of drudgery off the buyer. A buyer can start thinking as a buyer. We have the intuitive side of man working. His productivity can go up immeasurably. Yes, we can increase our turnover by formulas and systems, but that extra dollar, that extra payoff, comes when all of a sudden, rather than shuffling paper, the buyer can sit and think about the best buy, the best opportunity, seasonality, and when that last deal took place. We see this has a big impact.

Likewise, out of a system such as a buying system, one of the biggest benefits is the ability to measure performance.
I have found that if you give most people accurate goals, attainable goals, and show them how they can reach them, most people will perform better without any real extra training or direction. Just the knowledge of what's possible is a key ingredient to productivity.

The same is true with our suppliers and the wealth of information we can obtain about their service levels, etc. Once they know you have a yardstick for them, their performance starts improving without a lot of beating over the head with a club. So again, the awareness, the knowledge of our business functions, works to our advantage. We give people a chance to think intuitively about what they are doing.

In distribution systems all of us have been through a million different approaches. We can get into some interesting debates about semi-automation vs XYZ. We have a semi-automated warehouse, and we have conventional warehouses. I think the original reaction to automation is that it's a panacea. It's the industrial revolution approach. Let's have a machine that will pace the man. That's the answer.

We installed an automated system which functions very well but meanwhile we had been working on the soft side of the equation with the information and data we had gathered from engineered labor standards, etc. By the time we had the automated systems going, production at our conventional houses was rising to the point that there was very little difference in performance, but a much greater investment on the automated side of the equation. In facilities we've opened since then, we have adopted some of the things we learned from the automated system. But essentially, rather than giving up on the conventional approach through the vast wealth of data available to us. By learning how to set reasonable goals for people, and showing them how they can reach these goals, our productivity has gone up immeasurably. Rather than making large investments in hardware, we can derive great benefits from the information and data we have. We can get benefits from automation, but we can never get the lines to cross from a return on investment point of view.

Similarly, we have our transportation and trucking systems. We have all kinds of scheduling systems, but probably the little machine that will give us the biggest return is an electronic meter in the trucks. It expands our knowledge on how the driver is doing, what speed he shifts gears, how long he idles, how long he stops. We have put a tool in the hands of management and can set reasonable performance criteria for somebody there was no way to effectively supervise before. We see a big, big productivity gain simply because information is readily available the minute he comes in from his run. We can sit down and talk to him about his days work and how he performed. Our drivers become better drivers. They make faster runs. They don't break the speed limit. Safety improves. This expansion of knowledge about what we do and how we do it, is the tremendous opportunity presented by technology today.

Finally, I'd like to discuss the hard and soft savings of scanning systems. The data availability of these systems is vast. We have a tremendous opportunity to know more about the flow of our goods, labor scheduling, and you name it.

Because we deal primarily with the independent supermarket, the most exciting thing is the micro-computer at the store level. We have all kinds of central retail accounting, central support for scanning systems, etc., but one problem with main frames is scheduling of a big, centralized computer set-up. With in-store micro-computers, we can go to distributive processing. We can concentrate on writing the software for retail accounting programs, the payroll program, the DSD program and the like. We can put it in the independent's hands and when he starts interacting with that micro-computer his interest level and ideas will start reflecting in the kind of data and formats he wants. His response time to any situa-
tion, and his productivity, will be greatly enhanced. One of our strengths is the ability to reflect the individuality of each independent and his micro-market. Now, rather than the operator just receiving data, he's interacting. I see tremendous opportunities accruing.

We are creating the tools to assess a situation, to massage the numbers and formats, and to look for the niche for his market or applied system. We'd have canned programs, but we'd encourage these people to learn how to do simple programs and alter the system to fit their individual needs. We see tremendous soft savings. The ability to think about what we're doing and to interact with technology are the key opportunities I see for retail stores.

I've just run through a litany of what we do. I'd like to close by pointing out one of the problems of having this wealth of information. Sticking to the old 80/20 rule requires a great amount of discipline. We can bury ourselves alive in statistics if we don't watch out. We must concentrate on determining the critical data to run our business. Where can the greatest payoff come? We must concentrate on that question because we have access to more data than we can comprehend. The role of management, working with the research people, is to know what information we need to compete in the marketplace, and obtain it in a timely and concise format. Management resources are limited and we must concentrate on getting the biggest bang for our bucks. That is the key component.

Our concentration on technology to improve our knowledge, and our ability to act on information we acquire through the vast information network we've established is the greatest opportunity for productivity enhancement I see today and into the future.