# Challenges to Food Distribution Research in the 1970's Keynote Speaker

Food 7 0's

The Speaker keynotes the problems for food distribution in the next decade, points out the problems and errors of the past and challenges the researchers to set about solving the problems of the future.

William Applebaum Lecturer Emeritus, Harvard University Graduate School of Business Administration

What Are the Challenges?

Challenges are generated by conditions that affect desired objectives. What then are the desired objectives of food distribution research? The answer must be to contribute toward the efficiency of bringing food from producer to consumer.

Thus, in evaluating changes in marketing efficiency, we seek to ascertain what benefits these changes produce for the consumer either in greater values or in additional services, or in both. The mere appearance of new methods or devices for marketing is not necessarily an improvement in marketing efficiency. Nor is the discovery of new markets for a product or an increase in total sales. Many a merchandising idea has produced increased sales but not always at reduced cost, or at a profit. Even an increase in profits is not a valid measure of greater marketing efficiency. A monopoly or cartel can achieve higher profits by restricting benefits to the consumer. Only when benefits to the consumer have been achieved has marketing efficiency progressed.

The Role of Supermarketing in Food Distribution

I shall address myself to the efficiency of food distribution by concentrating on supermarketing, which is the all-dominating channel of food distribution. This, of course, includes retailing and wholesaling functions.

The supermarket of today provides the conveniences of one-stop shopping in a physically attractive atmosphere, with comfortable temperature conditions both winter and summer. A large selection of quality merchandise, high standard of sanitation, self-service and parking save the customer considerable time. Checkcashing, rest room, carriages for carting the babies and other facilities and services are provided. The net result is more pleasant shopping for food than ever before.

Basically, the supermarket has followed two major roads to greater food retailing efficiency. These are: (1) simplification or elimination of work; and (2) reduction of waste of food. The most rewarding gains were achieved by concentrating effort in the area of maximum activity, namely the store. Several secondary roads to greater marketing efficiency outside the store area have also been rewarding. The most significant of these are: improvement of warehousing and transportation, and vertical integration.

Work elimination in supermarkets is accomplished by transferring it to the customer or to the supplier. Reduction in food waste in supermarkets is achieved mainly by refrigeration, rapid turnover, and prepackaging of perishables. Modern single-story warehouses with a complement of mechanical devices, and huge tractor-trailers for hauling, add to distribution efficiency. Better refrigerated facilities in warehouses and in trailer-trucks, more pre-cutting of meat carcasses at central points and daytime delivery of perishables have all contributed to a reduction in the waste of food. Furthermore, more orderly buying - based on better records of turnover, and on improved commodity market information as well as on a more intimate knowledge of customer preferences and buying habits - has contributed to more intensive utilization of warehouse space and of transportation equipment.

Vertical integration is usually a manifestation of bigness in business. As a company gets bigger, it takes on additional complementary activities. Somehow in retail food distribution efficiency is not always directly proportionate to the size or age of a company. The total efficiency score of a company or of an individual store is the resultant of many factors. No company has yet demonstrated an ability to excel, or to be outstandingly efficient, in all phases and at all points of its operations.

In recent years the supermarket industry has essentially reconstituted itself into a new, vastly expanded, model. As a result of new store construction, relocation or remodeling, the stores are much larger, facilities are much better, self-service is more widespread, parking facilities are more adequate, new departments have been added, and the number of variety of items now being carried has increased substantially, even though the supermarket remains primarily a food retaining store.

### Future Efficiency in Supermarketing

Now let's attempt to appraise the supermarket future efficiency.

There will be more supermarkets, many more. Some of these will be larger than the giants of today. They will be architecturally more beautiful, and their interiors will be more lavish - but functionally more efficient. An increasingly larger variety of goods will bulge their walls. Self-service will become almost 100%. Additional attractions and conveniences will be introduced to entice and please the shopper. All this will not reduce store operating expenses.

Concerned executives, supervisors and managers will search and try to experiment as they have never done before to find methods and tools for simplifying work and for further reducing waste in food. They will organize to induce and help growers, packers, processors and manufacturers to take over more and more of the prepackaging work now being done in supermarkets and many of them will welcome all the research aid that the USDA might be able to render in this total endeavor. For the customer, all this will be just wonderful.

Supermarket employees who have made tremendous gains right along in higher pay, shorter hours, better working conditions, and an increasing array of other amenities - gains proportionately much greater than those made by employees in other retailing fields - will continue to strive for greater rewards. These they will most surely get as production per man-hour increases.

Finally, taxes will probably not diminish for some time to come. In the long run these taxes will be included in the price paid by the customer. Because owners of businesses will continue to receive a return on investment sufficient to invite risk in enterprise. Those supermarket operators who continue to serve their customers best, and operate most efficiently will have the pleasure of sending the largest checks to the collector of internal revenue.

Whether supermarkets will be able to do all these wonderful things for their customers, for their employees, and for their country on the gross margin of today, or even less - and yield a satisfactory return on mounting fixed investment - is not revealed in our imperfect crystal ball.<sup>1</sup>

Food Distribution Efficiency in the United States

Food distribution in the United States is highly efficient. It is more efficient than in any other system of distribution in the world. We can be proud of our achievements.

Enormous efforts have been made and are being made and will continue to be made in our food distribution system. Part of this total effort is distribution research. The research covers packaging, materials handling, transportation and marketing. Most food distribution research has been carried out on small scales, by individual companies in an endeavor to maximize profits. The USDA research effort has been mainly on production and utilization. By comparison the USDA's research efforts in distribution have been very small, and mostly on material handling, transportation and packaging. The marketing of commodities and livestock has received far more attention than the marketing of consumer products in retail channels. But the results of the total research efforts to continue into the 1970's.

#### Areas for Major Research Effort

What are the challenges in food distribution research for the 1970's? Is the future going to be different from the past? Yes and No. Basically the tasks are

<sup>&</sup>lt;sup>1</sup> The preceding ten paragraphs are a quotation from a paper I delivered at the Winter Conference of the American Marketing Association, in Boston in December 1951. I submit that these statements are still applicable today.

really the same. But the conditions and opportunities change. I believe that the areas of research which hold out the maximum rewards for the 1970's are: (a) work productivity; (b) central meat prepackaging; (c) better quality control of fruits and vegetables (with brand identification); (d) store location strategy, (e) and product profitability.

As we look at the record of the increase in hourly compensation for workers in the supermarket industry and the increase in their hourly productivity for the last decade, we find that the increase rate in compensation has been greater than the increase rate in productivity. In other words, productivity has lagged behind costs. If this continues - and it is likely to continue unless we can find ways of putting in more capital investment per individual worker - the cost of doing business is not going to diminish. To maintain the same level of labor expense per dollar that a customer pays, it will be necessary to increase work productivity. In my opinion, this has been and still is the major single area for industry attention.

Those familiar with Clausewitz's writings on the art of war know that to defeat an enemy, he should be attacked at the point of his greatest concentration. If he is destroyed there, the rest is a mopping-up operation. If we can get work productivity more efficiently in our entire system of distribution, that will be more significant in terms of reducing costs than all the other research that we can do. Here is a task and a challenge for the 1970's!

The second area for research is central fresh meat prepackaging; some of it may be frozen. I am convinced that during the 1970's this area will receive a great deal of attention. I am sure this has great promise, especially in view of what is going on in other countries and of things developing in this country. Central meat prepackaging is long overdue. The reasons: tradition, inertia and perhaps the unwillingness of meat packers in years gone by to experiment. This, then, is an area of challenge for the 1970's.

For a long time research has been reaching out for better quality control of fruits and vegetables. I believe more can be done to continue to improve this area - an area in which we are probably the best in the world. I do not know of any country in the world where we can get a great variety of fresh fruits and vegetables all the time, in practically every food store, as we can in the United States. We have done a herculean job, but there is still room for improvement. I venture to suggest that we will have more branding in fresh fruits and vegetable products. Those that continue to develop brand identification and make it stick - make the quality consistently commensurate with their brand - will do the consumer a great service.

Another important area for research is store location strategy. My interests and efforts in this area are, I believe, well known. So I'm not going to elaborate on this because I might be accused of being partial. Nonetheless, this is an area where we need a lot more research than we have done, but we are making progress there too. Finally I list product profitability as an area for research. It is important, but I do not attach as much importance to increasing our future efficiency in food distribution by this route as some other people do. I shall return to this.

### Effect of Science and Technology

The effect of science and technology has been to bring about more mass production, mass communication, mass consumption and mass distribution. In order to take advantage of science and technology firms have to be larger, farms have to be larger, distribution centers have to be larger, stores have to be larger, everything has to be larger. And that means more capital investment. That means superior ability to manage.

Science and technology are compelling this and we can not stop this trend or reverse it. It's aforce driving our entire economy and our entire distribution system. So we have more automation - automation is not something new, we have had it for a long time - and we will have more and more of it. We have computerization, and the computer is changing many things. It is making many new things possible, and we are trying to combine computerization with automation in our distribution system.

The behavioral sciences have also taken on a new meaning for distribution. These sciences look at the human being who is in the middle. Manufacturers of national brands have been interested in the behavioral sciences to help them sell more products to the public. Each manufacturer is concerned with his own products and not in the total harmony of production, distribution and consumption. So they have studied the consumer from this standpoint. Aside from that, however, not very much has been done to study the consumer and his needs. None of us can be proud of that.

The behavioral sciences have added another capability to study the man on the job. Here, I think, we are making some progress. We are beginning to learn and understand more about employees. The effort started in industry; it is now percolating down through the store, the warehouse, and other places. We are searching for deeper knowledge in how employees react, how they behave in groups, what can be done to stimulate them, etc. The behavioral sciences will help us with respect to better employee education, better employee motivation and better organization. All these things are "in the works" and they are part of the distribution system. Without these things we are not going to achieve the end results that we hope to achieve.

These are the areas, these are the tools - automation, computerization, behavioral sciences - all put together in a package. This also means we now need scientists from several fields to work together, because none of us really has the total knowhow, the total capability, for doing the job alone.

#### Need for Cooperative Industry Research

Some of the problems of food distribution are industry-wide problems. No one company can solve them alone. These need to be researched jointly. But that

is nothing new; it was recognized quite some time ago. Permit me to be subjective here. About 15 years ago I convinced the Super Market Institute that it ought to try to do some cooperative industry research. I prepared a paper (Curt Kornblau edited it) entitled, A Plan for Cooperative Marketing Research in the Food Distribution Industry, and the Super Market Institute published it. A meeting of executives from the Super Market Institute and from the Grocery Manufacturers of America was convened in Rye, New York. I made a presentation on the potentials of industry cooperative research. Other speakers developed the theme. The Super Market Institute was ready to put in \$10,000 of seed money to explore what the industry could do together. The idea was to set up some kind of organization for such research. One speaker suggested the need of half a million dollars to fund such an undertaking. It was felt that a whole series of topics could be researched. The Grocers Manufacturers of America got scared they thought the Super Market Institute was going to put the squeeze on them for half a million dollars. The discussion developed into a display of verbal fireworks and resulted in a stillbirth. I was very disappointed. Craig Davidson came up to me, put his arm on my shoulder and said, "Bill, don't worry, you are just a man with an idea ten years too soon."

Fortunately it did not take all of ten years for the idea of cooperative industry research to start sprouting. Most of us here have been involved in such research one way or another. There are all kinds of cooperative research projects going on. Different branches of the food industry and producers of equipment work together with retailers, wholesalers, and with transportation firms on solving mutual problems. They work together and make their facilities available for joint research. That is cooperative industry research. We need a lot more, because there are many problems which no one company can solve alone.

#### The Role of a Food Distribution Research Journal

The importance of timing is recognized in business, in politics, in war, and in our personal life. A good idea, a bit too soon, may not be so good. On the other hand, one can miss an opportunity. To quote Shakespeare, "There is a time in the affairs of men, which, when taken of its flood, will lead on to fortune; omitted, and all the voyage of their life is bound in shallows and in miseries." Now is the time for cooperative industry research. Let's not miss this opportunity!

The Marketing Science Institute was established in 1962, through the support of a group of manufacturers for the purpose of conducting basic research industry-wide on marketing problems from a more scientific point of view. Something of value has already come out of it - perhaps not enough. With the transfer of this Institute to Cambridge and under different direction we can look forward to very worthwhile results.

The American Marketing Association, regrettably, has not been as deeply involved in food distribution research as it ought to be. Maybe the reason for this is that the vast majority of the active people in the American Marketing Association are oriented toward manufacturers' problems - manufacturers of specific commodities; food, drugs, cigarettes, soaps, etc. These people are concerned with research on their own product. The American Marketing Association has not set up a strong division with a very strong vice president in charge of food distribution research. Nor is the Journal of Marketing Research sharply oriented toward food distribution research. I believe that the time has come for the Food Distribution Research Society to develop its own quarterly journal. Let it be a scientific journal with all the dignity, competency and excellence that one would expect of a scientific journal. Let this journal bring together the best ideas and research results of its members, and let it serve those who are primarily interested in food distribution. Such a journal will keep us informed; it will provide a medium for self-expression; and it will help us go forward. The time has come to do it and we can find the money for it if we try. This is another challenge for the 1970's!

#### Product Profitability Studies

Now let us return to product profitability, and make some points. In the early 1960's, McKinsey & Company produced some studies on product profitability. These studies made quite an impact on the food industry. They were presented at meetings of the National Association of Food Chains and the trade press gave them wide publicity. Leading figures in the industry testified their support of the work. An article appeared in <u>Business Week</u> on October 26, 1963 (two pages with pictures) and I quote briefly to convey the flavor:

A New Textbook for Supermarkets. Traditional methods for figuring profit may be inaccurate, a new study suggests - and some of the fastest-moving items may be money losers.

Traditionally a return of less than 2% net profit on \$57 billion of annual sales for the nation's food retailers is not too bad - or so the textbook says. Supermarket operators, particularly, accept their small return because of their hallowed tradition: greater volume makes slender profit margins acceptable.

And they have been both skeptical and resentful when outsiders have told them they don't really know how to make a profit - even when average net return on sales have fallen for six years to a present average of 1.2%.

Surprise. But now, by people who have impeccable credentials top executives in their own business (pictures) - they have been told to listen to a new history-making study of supermarket operations. This study shows such things as: Profits can't be figured by adherence to the time-honored "gross profit" methods - percentage difference between what is paid for an item and what it's sold for. Fast-moving items aren't always the most profitable; sometimes handling costs mount too fast. But the study shows this to be a big loss item. Such a common item as flour uses up 44% of gross profit in warehousing and transportation before it even arrives at the store.

No formula for determining the direct costs has been available to any retailers - either food or general merchandise - until General Foods Corp. commissioner McKinsey & Co., Inc., to make the study, which was released last week in New York City at the annual meeting of the National Association of Food Chains.

McKinsey & Company made a series of studies for several manufacturers and the National Association of Food Chains. These studies ranged from groceries through frozen foods, meat, produce and soaps and detergents. They all dealth with product profitability.

I watched this development with great interest. In the 1940's I directed some studies for Stop & Shop, Inc. on store space allocation and product profitability. Later, in 1961 I developed at the Harvard Business School the <u>Tiger</u> <u>Markets, Inc.</u> case (RD 1817) which deals with allocation of space and product profitability. In this case I incorporated many ideas from other sources<sup>\*</sup> including <u>More Efficient Inventory Control and Space Management for Grocery Depart-</u> <u>ments of Retail Food Stores</u>, by Martin Kriesberg and Martin Leiman, USDA, Agricultural Marketing Service, Washington, D. C., 1961. This study is a scholarly attempt to find out the <u>net</u> profit for individual items in the grocery department. The study came out as a typical government mimeographed publication. Kriesberg presented it at the University of Delaware; <u>Food Topics</u> published the report in May 1961, dressed up and illustrated to bring the findings to the food distribution industry.

On October 7, 1964, I wrote to C. W. Cook, then president of General Foods Corporation, and I quote in part:

You will recall that you expressed an interest in seeing the material which I made available to Andy Pearson when McKinsey started their General Foods-McKinsey Studies. Attached you will find a set of this material.... Once again I would like to reaffirm that General Foods has made a very important contribution through the product profitability studies which it initiated and supported. This has triggered a wave of studies on product profitability both in the U.S. and in Europe. It has also stimulated an appreciation of the value of research, to marketing decisions.

On November 12, 1964, C. W. Cook replied, and I quote:

Some of my associates, including Jim North, were very interested in reviewing the material which you so thoughtfully sent to me. It was very apparent that the general approach which was reported as a result of the General Foods-McKinsey Study was being pursued

\* These are all listed in the Tiger Markets, Inc. case.

by others, but I like to believe that there is far greater understanding of it today and that it will be increasingly true.

There is little in the McKinsey Study either methodologically or conceptually that was not already in the Martin Kriesberg and Martin Leinman study. The Tiger Markets case deals with the whole problem of space allocation and the difficulties encountered. I gave all this material to Andy Pearson, and subsequently, I sent it also to General Foods, as indicated in the correspondence with C. W. Cook.

There are important lessons for all of us, in this account. The first lesson is that the Kriesberg study did not get strong publicity, while the McKinsey study did. It was skilfully staged at a meeting of the National Association of Food Chains, with business executives appearing on the platform. It was played up in the trade press; <u>Business Week</u> reported it, and so on. The Kriesberg study did not get such promotion. It was published in <u>Food Topics</u> in May 1961. The McKinsey Study pretended originality, and gave no credit to any of the work done before, from which McKinsey benefited. <u>Business Week</u> very likely was unaware of any previous studies. The executives of General Foods likewise did not know that McKinsey was riding on the backs of other researchers. We can surmise that McKinsey was paid for originality.

During the 1960's, in special seminars at the Harvard Business School, I questioned a number of vice presidents in charge of marketing for important food industry firms as to who had seen the Kriesberg study. Not one! Even though it appeared in <u>Food Topics</u>, a trade journal. These vice presidents do not have much time to look at the trade journals, or their market research directors did not bring such items to their attention.

Without any question, the McKinsey Studies were useful. They stimulated new interest; they stimulated research and they got the industry involved. The Martin Kriesberg study did not do that. But the McKinsey Studies overestimated, overstated their usefulness. They promised too much. They urged the industry to install their system, which they described in nice brochures. I do not wish to imply that this was done without good faith.

But are these really objective studies? And why were they oversold? I submit that it should be the duty of professional market researchers to examine and dissect such industry research and be heard in voice and in print. The objective here, the challenge, is to strive for more thorough research. A Madison Avenue type of approach to promote marketing research no doubt creates attention and interest but the product must be right. With your own journal you will have a good chance to make yourself heard.

The McKinsey Studies did not do all that was purported they would do. They were a disappointment, in some quarters at least. I do not know of any firm that adopted completely the McKinsey approach. Some things were simplified, especially the SLIM procedures which were later developed by Edward M. Harwell. \*

## COSMOS and Future Expectations

The National Association of Foods Chains has rightly continued this project, and has gone from McKinsey to COSMOS, which is a very good name in this space age. COSMOS stands for Computer Organization in Simulation Modeling for Operating Supermarkets. The words put together fit COSMOS. What is COS-MUS and what does it promise? Last week, in Boston, there was a second presen tation of COSMOS at the annual meeting of the National Association of Food Chains. An advance release in <u>Chain Store Age</u> (October 1969) from an interview with Clarence Adamy, president of NAFC, stated:

Electronic Whiz-Kid Managers Next? "Wanted: New breed managers. Must be totally versed in COSMOS technology as it relates to product allocation, display item selection. Experienced in use of on-line, instore computers; know automated front-end technology.... Must fit 'Class AAA model' managers!"

The manager described in the ad doesn't exist now. But five years from now, the computer-wise, technologically hip manager may be the only kind some food chains will hire.... Simply stated, COSMOS will initially recommend the exact amount of shelf space per store a product should receive in order for it to realize a net profit goal....

Cosmos will eventually cover every item in the store. Thus, it becomes a tool any food chain can use to more effectively meet the challenge of tailoring or customizing item mix to the store's trading area. It will help buyer-merchandisers better evaluate new items; with it, they can quickly locate - and discontinue - slower-moving, less profitable items....

What next? Using in-store computers, managers will automate store accounting tasks. Cash and sales data, payroll information, direct delivery totals - all will be transmitted in code via the computer to headquarters rather than being written up in report form and sent by mail or truck.

Thus, in the decade ahead, more and more drudgery will be taken over by machines, freeing the store manager for more essential jobs such as managing people and servicing customers.

Some engineers claim that a lot of that work could also be automated. It's even thought that robots will one day manage stores; they're kidding, of course. Or are they?

<sup>\*</sup>For further information see Harwell's article in Chain Store Age, June 1965.

Next, I quote one paragraph from a very long speech by William Knobloch, Vice President of Case and Company, Inc., which he gave at the NAFC meeting last week.

This is the COSMOS concept. It effectively harnesses the technology opened by the computer in doing man's routine work. It is designed to make information man's tool. It simultaneously and continuously evaluates many of the complexities surrounding your environment. It not only adds to your profits, but it also provides better service to your customers.

There is also a paragraph in the speech which says that COSMOS is not the whole answer; that some executive judgment will still be needed.

## A Bit of Caution

Are the claims and anticipations in these quotes realistic? I will stick out my long neck - too old to be afraid any more.

After World War II, I was deeply involved in studies on frozen foods. At that time the predictions of all the experts were that within a decade 15% of the merchandise sold in food stores will be frozen foods. I didn't believe it, and so argued with some of my colleagues. Anyway, we made studies to anticipate the future. Now, more than two decades since the War the sale of frozen foods in supermarkets is on the average hardly 5%. The 5% represents not only the lines that were sold at the end of the War but includes all the new products that frozen food technology has made possible: orange juice, potato sticks, prepared dinners, frozen baked goods, specialties, etc. The old line goods that were expected to represent 15% of total store sales do not represent more than 2% of the total sales. So that did not fully materialize.

I plead guilty from the start about the next case - just as guilty as the original authors. In 1955 we were excited about the potentials of atomic radiation for peace. Atomic radiation was going to do away with the need for refrigeration. Scientists got together at a conference and expressed their enthusiasm about atoms for peace. I believe it, and made a speech on "Coming Changes in Food Distribution," delivered in Minneapolis, at a conference of the American Marketing Association. The paper was written in two-three days, off the top of my head. It was promptly published in several journals. Why? Because it predicted all kinds of wonderful things were going to happen, as a result of atomic radiation of food. As everyone knows, atomic radiation results fell flat compared with the predictions. The side-effects have not yet been eradicated, and there are still some questions about how much radiation is safe.

So, here are two cases of great promises that did not come up to full expectations! Now, the computer, with all the things it is going to do for us. But what's the time table? An article in last month's <u>Fortune</u> magazine stated that the computer is great but that it has not yet delivered all the things for business that were hoped for. The computer, today, is a status symbol. Be that as it may, the engineers have done a magnificent job. However, when it comes to using the results of the computer and of getting the people who might be using the results to use them properly, that has not been figured out satisfactorily. A big job lies ahead here. As of this moment we have not realized the potentials of the computer, even though they exist.

Another interesting case deserves telling. An A & P Vice President in charge of the produce operations was asked how come that the produce departments in A & P were not what they ought to be, and they were not as good as some of the independent fruit and vegetable stores. "Don't you know the produce business?" His answer was: "A&P is a hundred years old. We know as much about the produce business as anybody else. We know where the stuff grows and the conditions under which it grows. We know when it is available, how it is transported, what it costs, and we know how it should be handled. We have manuals for our employees. But the trouble is that with all this knowledge which we have developed, we turn over much of the work in the produce department to a part-time high school kid. He doesn't know all these things, and may be doesn't care to know."

Where are the supermarket chains going to get, five years from now, all those managers with the computer training and everything else? Will then train them themselves? Maybe. I am not implying that COSMOS isn't good. This we do not know yet. But we should ask: "Will the chains be able to put it into effect? Are the human resources prepared for it?" This is also our job to research in the 1970's. What is technically possible may not be realistic for other reasons. We can get to the moon, but how many countries can afford it?

And now for my final story. When Joe Hall was President of The Kroger Company he came to the Harvard Business School to give a Toby Lecture. In the course of the lecture he told the students that when he came to work for Kroger in 1930 the company had 5,500 stores and was doing about \$250 million of business a year. When he became president of the company in 1954, Kroger was doing a billion dollars in sales and had about 2,000 stores. At present Kroger was doing about \$2 billion in sales a year in about 1,400 stores. And he added: I visualize the day when Kroger will do all the food business in America, and won't have a single store.

Would it not be better if studies such as COSMOS were made quitely, carefully, tested out extensively, the bugs taken out, and then unveiled to the industry?

#### Food Distribution Research

The objective is clear: efficiency in food distribution!

There will be at least 30 million more Americans by 1980. There will be

changes in styles of living and consumption. There will be new products and innovations in distribution. These will come in pieces, some faster than others. Distribution research will play its role. The increase in population will take place in cities - mostly in the large metropolitan areas, which have plenty of troublesome problems. Here the central cities, especially the core areas, are crying out for greater efficiency in food distribution. This is a challenge of no small magnitude. Who will research it? Perhaps the Food Distribution Research Society might decide to explore this topic. Maybe it can come up with some useful guidelines for businessmen who must act to meet the needs of the underprivileged segments of our country.

The individual food distribution researcher does not work altogether independently. He has a job to do. Typically, what he does is related to the immediate problems of the firm or institution to which he is attached. Typically also, the research project on which he works is narrow in scope and duration. These conditions are not likely to change much in the 1970's. However, as in the past, in totality the research will add to food distribution efficiency.

As I look back over the last four decades of food distribution research, I take much satisfaction in what the researchers have accomplished. There were very few of us in this profession in 1932, when I first got my feet wet. We had little knowledge and crude tools to work with. The profession has come a long, long way since. It is surging ahead with new and superior tools. It is competent to study a tremendous range of problems, and it will. This conference is proof of these assertions.