

Market Area: Preparing for Total Systems

by

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Introduction

This is the second paper in a three-part series. The first, "Food Industry Management: Preparing for Total Systems,"¹ emphasized the individual firm and what management could do to get ready for the upcoming dramatic changes in the total system. This paper will analyze the major components of total systems using the market area concept as a point of focus. The third paper will add the national perspective and complete the total systems concept for the U.S. food industry.

Major Components of Total Systems

For purposes of this paper, the major components of the total system will be: (1) products, (2) consumption, and (3) structure. These components are separate, yet related, and are not the only components of the total system. They are, however, the "key" components for the market area. Other components will be added in the third paper. The market area, a geographic area similar to the standard metropolitan statistical areas used by the Bureau of the Census, comes into play as a longitudinal slice is taken from the system and these three components are examined. The reader will be asked to visualize a multi-dimensional concept that can be alive with a flow of energy, activity and all the complexities of day-to-day activity. As appropriate background material, the reader might want to review the following:

"Nutrient Delivery System - A Human Feeding Concept for 2000 A.D. and Beyond,"
Journal of Food Distribution Research,
vol. 4, no. 3 (September 1973), pp. 10-15.

"Food Distribution Systems, Inner City, USA,"
Journal of Food Distribution Research,
vol. 8, no. 2 (June 1977), pp. 43-49.

The first article looks at the "essence" of systems, and the second is relevant to the market area concept.

Products, Services and Perceptions

Products are defined as physical items containing nutrients; services are additions to the products--for example, preparation and packaging. Perceptions are those images the customer has of the products and services. The three together make up the "WHAT" of the system. These are the items that are bought and sold, move through the channels, and eventually satisfy some set of consumer needs and/or wants.

Consumers actually buy some combination of all three of these elements. One of the major difficulties that occurs in the measurement and evaluation of systems' structures is that an increasing amount of services and perceptions is being added to products. Categorization and evaluation of these two items in terms of contribution to consumer satisfaction is an area where usable data are scarce.

In addition, there is also an increasing number of combinations of products being offered for sale which compounds the inventory management and accounting process, as well as the sales and advertising situation.

Of course, there is a constant stream of "new" products entering and "old" leaving the system over time.

Consumption

On the other end of the system, the area of consumption provides the "WHO" and "WHY" of the situation. Theoretically, all the effort and investment in the system is directed toward the ultimate consumption of a set of products, services and perceptions, thereby satisfying a set of consumer needs and wants. Of course, this set of needs and wants is constantly changing, reflecting life styles of consumers. The work here is designed to help create a more efficient and effective system to anticipate and satisfy these wants and needs.

In this particular paper, the consumption segment has been limited to a specific, well-defined market area (e.g. the Baltimore-Washington SMSA). The portion of the total system designed to meet the needs of these particular consumers will be discussed next.

Structure

The series of institutions, functions, technologies, factors of production and information systems, linked together in a particular pattern provides the "HOW," "WHEN," "WHERE," and "HOW MUCH" of the situation. Products must be produced and/or manufactured. Some are processed--form is changed. A variety of intermediaries, wholesalers, retailers and food service firms are involved.

For a particular market area there is a given structure, through which pass products, services and perceptions to be consumed by area people. The principle is relatively simple. The complexity is added by the reality of a number of firms interacting on many different levels, along with an additional set of forces from the outside.

Common Language

For purposes of description, communication and evaluation, the system needs a common language. In reality, there will be a series of common languages, capable of being linked together at strategic points for system-wide use.

The language of products has to do with sales, number of units and turnovers. The UPC system provides this information very well for items under present coverage. The areas of perishables and food service need a lot of work, but will, eventually, be brought into the UPC system or some companion version of it.

The language of consumption is the reverse of the product segment of the system. It is also needs and wants and life styles, trends and fads, nutritional needs and all the rest of the items which make up consumption patterns--what some call "quality of life."

The language of structure is more complex than the two discussed above. First of all, it deals with items of a physical nature--productivity and efficiency--as well as with financial entities--revenues, costs, profits and return on investment. Second, part of the language is appropriate for the individual firm and part for the industry as a whole. Third, there is a qualitative dimension somewhere within the system's structure.

What is important here is *not* to fall into the trap of trying to establish one universal language for the entire system. What must be done has three parts: (1) Decisions must be made regarding which elements are important in the system--criteria, parameters--measures of the quality and quantity of the system. (2) The several languages which best serve the individual segments of the system need to be perfected. (3) The linkages between these languages must be developed so that an accurate, timely picture of the total system can be completed.

Measurement

Given that a common language has been established for the various segments of the system, with appropriate linkages, three questions are relevant to the measurement issue: (1) *What* to measure? (2) *When* to measure? (3) *Where* to measure?

The "what to measure" question has been touched on in the previous section on common language. For the system segment on products, a completed version of UPC should provide necessary data. On the consumption side, a lot of work has been done and a lot more needs to be completed to keep up with and to anticipate ever changing consumer wants and needs. Also, the qualitative aspects of consumption need to be emphasized.

As for the structural portion of the system, some work has been done on an industry by industry basis, from a historical perspective. First, the capability to make more and better projections into the future needs to be developed. Second, and most critically, very little on measurement of total system performance has been accomplished. The relationships between various parts of the system have not been specified and management has little experience in "asking the right questions" in terms of the total system. Having little experience is not the problem in this case. It is in not being willing to try to measure the total system where management "errs" this time. The imperative here is to be able to measure and evaluate the financial and physical productivity and performance of the total food industry system in the United States, for both comparative and planning purposes.

The issue of "when to measure" differs between the major segments. Measurements in the flow of products are almost instantaneous, and rightly so for efficient inventory management. Measurements in the consumption area are much less frequent, and from a public information standpoint, per capita consumption data excluded, are so outdated as to be of very limited use. Industry readings of "consumer pulse" are done annually and provide some insight into changes in the needs and wants of a sample of consumers. There is a

need for much data on a local and regional basis.

In the structure segment, the question of when to measure is a difficult one. Individual firm and industry financial and productivity data are available annually for selected parts of the system, but not all. Industry data pertinent to the total system are available from the Bureau of the Census every five years. This is not timely enough, especially in periods of rapid structural change, as are currently being experienced in the food industry. Also, there are problems of rigidity in data classification by the Census Bureau that mask the results of some data sets.

As with the question of what data to request, the frequency of the data collection and publication needs more emphasis. Data regarding the broader aspects of structural changes are not needed as frequently as product data, but are most certainly needed more frequently than they are presently being made available.

The issue of "where to take measurements" is limited in this paper to the market area. This is appropriate for both the products and consumption segments. Data in these two segments can be conveniently and meaningfully packaged around a market area concept. Consumption patterns can be easily subdivided by age, sex, race, ethnic or any of a long series of other characteristics, and corresponding products can be channeled into the market portion requiring them.

By way of summarizing the measurement issue, first, a series of very different kinds of measurements will be needed, because the system is made up of several distinct, but related, segments. The keys to forming an accurate and timely picture of the food system will be the linkage of these different data sets and the creation of additional data sets to supplement current data output. In terms of timing, data are needed more frequently in some segments than others. But the overall situation should be kept as timely as possible. Also, measurements should be taken where needed for the products and consumption seg-

ments which will be in increasingly more narrow segments. Specific products will satisfy smaller segments of the market. Structural measurements will be taken more broadly, with variation by industry and institutional level.

National Coordinating Group

Before drawing this paper to a close and setting the stage for the third one, it is appropriate to make another plea for a *national coordinating group* to watch over, nurture and implement the total system concept. There have been a number of joint industry projects in recent years that have made significant contributions. Of course, there surely will be more of these efforts in the future, and rightly so. However, these efforts are limited in scope and on a project-by-project basis. An officially recognized and funded group to work on total systems planning, development and implementation has yet to be put into place.

Summary

In this paper, the market area concept was used to focus upon "key" components of total systems--products, consumption and structure. The need for a common set of languages was discussed. The issue of measurement of the system (what, where and when) was highlighted. The importance of linkages between system components, languages and measurements was stressed. The need for a national coordinating group on total systems was re-emphasized.

Total System--Completing the Concept

The third paper in this series will move from the individual firm and market area concept to the total food industry for the United States. Additional components of the total system mentioned earlier will be added to a network of market areas to complete the concept of "TOTAL SYSTEMS."

Endnote

¹"Food Industry Management: Preparing for Total Systems," J. L. Cain, *Journal of Food Distribution Research*, vol. 17, no. 2 (September 1986).