

FSLM-2

July 1979

marketing information systems for the foodservice industry



Extension Division

Virginia Polytechnic Institute
and State University

VIRGINIA
POLYTECHNIC
INSTITUTE
AND STATE
UNIVERSITY
LIBRARIES

The Virginia Cooperative Extension Service by law and purpose is dedicated to serve all people on an equal and nondiscriminatory basis.

An Equal Opportunity/Affirmative Action Employer

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, and September 30, 1977, in cooperation with the U.S. Department of Agriculture. W. R. Van Dresser, Dean, Extension Division, Cooperative Extension Service, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061; M. C. Harding, Sr., Administrator, 1890 Extension Program, Virginia State College, Petersburg, Virginia 23803.

MARKETING INFORMATION SYSTEMS
FOR THE
FOODSERVICE INDUSTRY

Robert D. Reid

Virginia Polytechnic Institute
and State University

LD
5655
A762
1979d
c.2

MARKETING INFORMATION SYSTEMS
FOR THE
FOODSERVICE INDUSTRY

TA-NON-KA

BOOK

Robert D. Feld

Virginia Polytechnic Institute
and State University

MARKETING INFORMATION SYSTEMS FOR
THE FOODSERVICE INDUSTRY

Introduction

When developing an entirely new foodservice operational concept, or modifying an existing foodservice operation, a great deal of information is needed. This information includes such items as consumer needs and desires, income levels and spending habits of potential market segments, as well as a wealth of additional information. If the goal or aim of marketing is to satisfy the potential customer's needs, wants, and desires, then the operator of a foodservice operation must determine what the needs, wants and desires of potential customers are. In order to successfully plan and develop a new foodservice operational concept, an owner or manager needs to know as much as possible about the potential customer. With this information it is then possible to develop the foodservice operational concept in a manner which will satisfy the customer and generate a satisfactory return on investment for the foodservice operation and those who have invested in it.

This paper will focus upon the need that a foodservice operator has for marketing information and data. It will outline the types of data which should be collected and will discuss methods for data and information collection.

A Marketing Information System is the structured organization of people and procedures designed to produce a flow of information and data from within and outside the foodservice operation to use as a basis for decisions. Marketing Information Systems (M.I.S.) is a much broader and encompassing term than Marketing Research. Research indicates that data and information are collected for a specific reason or a specific project with only one time use as the major

objective. Any additional use of the data is merely secondary. Marketing Information Systems on the other hand, is an on-going data gathering process involving initial collection as well as routine and systematic data collection procedures. A Marketing Information System involves four basic criteria which are:

1. A structured organization or established system of people and information gathering procedures.
2. This system is designed to generate a continuous flow of information in order to provide accurate and current information for management.
3. This information is gathered from within and outside the organization and involves external information gathering methods such as consumer surveys and also internal information gathering methods such as employee meetings and patron comment cards.
4. This information is presented to management to use as a basis for decisions. It would be extremely difficult and quite hazardous for a foodservice manager to make decisions without accurate and current information. Professional management demands that decisions be founded upon sound information rather than by "seat of the pants" management.

Purpose of Marketing

Information Systems. The overall purpose of a Marketing Information System is to provide information which management can use in the decision making process. This information can be utilized in many situations, which include:

1. Decisions regarding market segmentation
2. Decisions involving advertising and promotional efforts
3. Capital investment decisions
4. Decisions concerning revising menu offerings
5. Identifying new or different sales opportunities

Finally, the use of a Marketing Information System should allow a food-service manager to speed up the reaction time to changing market conditions, thereby, allowing for a competitive advantage.

In order for any collected information to be useful to a foodservice manager, it should fulfill three requirements.

1. The Marketing Information System should be objective:

Information gathered needs to be quantifiable and analyzable. There is not room for personal opinion in a Marketing Information System. A foodservice manager needs as much purely objective data as possible in order to make a sound decision. For example, which of these two statements below seems to provide the best quality of information for decision making?

STATEMENT A: "As the owner of this restaurant, I think we should modify our menu so that we can appeal to more family business."

STATEMENT B: "A recent study has indicated that there has been a 10 percent increase in the number of families with children under the age of 10 in our area."

Statement B would appear to be more objective and offer quantifiable data on which to base a decision. Statement A is, on the other hand, merely a statement of opinion which is not supported by any quantifiable data on which to base a sound business decision.

However, too many foodservice operators' rely very heavily on subjective opinion for decision making purposes. As a result, the decisions are often incorrect.

2. The Marketing Information System should be systematic:

The Marketing Information System is not an on-off situation; it is a

system which is developed to provide an on-going information source for the foodservice operator. By gathering information in a systematic and continuous manner, more information in both quantity and quality is provided for a foodservice operator. This information may then be used in making comparisons and decisions regarding the future marketing thrusts of the company.

3. The Marketing Information System should be useful:

In the past, studies have been undertaken which produced information which was of little value. This obviously is not the purpose of a Marketing Information System. One rule of thumb to follow is this: collect, compile and store information only if it is used actively. Do not collect information and then file it away without using it. This is a waste of time and effort. Yet many foodservice operators in their attempt to gather any quantifiable information, will maintain data which is never used and is truly useless.

In order to determine the usefulness of gathered information, an informational flow chart should be implemented. An informational flow chart is best defined as a method of monitoring the usefulness of information which is gathered for analysis and interpretation. An informational flow chart is used for the same basic purpose as a time and motion study in evaluating effectiveness. Each time information is compiled, transported, inspected or analyzed, delayed, stored or discarded a symbol is used to represent this change. The symbols most commonly used are:

Operation or compiling of paper

→ Transportation

Inspection or analysis

D Delay

▽ Storage

T Discard or thrown away

A paper flow chart is most useful in evaluating how information which is gathered is utilized. Is the information gathered and used to analyze the operation? Is the information actively used in the decision making process? If information is merely gathered and then filed or stored, then there is not the need to spend time and effort in collecting the information in the first place.

Internal and External Systems

The simplest marketing information system to implement would be an internal system. Information gathering is done within the physical confines of the restaurant or foodservice operation. It requires less time and money than an external system, and if done in a proper manner can provide a foodservice operator with a wealth of useful and accurate information.

External systems are normally designed to gather information less frequently. This information is then used for market audits, capital investment decisions and decisions of a more major nature. As the name would imply, all information is collected from external sources. In order for a Marketing Information system to be totally effective, both internal and external sources need to be developed and implemented.

Internal Sources. There are three main sources of internal marketing information or data. They are: (1) sales records, (2) employees and marketing staff, and (3) customers.

Sales Records: There are no rules as to exactly what records should or should not be retained. Each individual operator will have to make that decision based upon individual needs. The records maintained may be simple

tabulations such as customer counts for all meal periods or a tabulation of sales of each menu item over a period of time. With easier access to computers through time sharing, today's foodservice operator should consider implementing a more sophisticated computerized system. In the last few years the cost of storing data by computer has been reduced significantly and this is a very feasible alternative for the modern foodservice operator. By utilizing computerized information tabulation and storage, the operator would allow for more complete tabulation of data, as well as nearly instantaneous recall.

Employees and Management Staff: All too often foodservice operators ignore the wealth of information which is gathered by hourly employees such as service people, hosts, and hostesses. These individuals are in constant contact with a restaurant's clientele, yet they are rarely asked to relay customer comments and reactions to operational changes, such as new menu items or decor changes. These employees represent an excellent source of information, though it may not be totally objective in nature. It is a good idea for an operator to sit down with the employees on a regular basis and discuss business problems and opportunities. Studies done by Frederick Herzberg and others have shown that employees like to feel recognized as being important by their supervisors. Mere recognition by a superior is one of the leading motivators according to the Herzberg study. Consequently, two advantages are to be gained by meeting with the employees. First, information useful to management in a marketing sense may be gained. Secondly, the meeting serves as a motivator for all employees. All employees need to be exposed to some motivation techniques.

The subject of these meetings is of course the responsibility of each individual operator to decide. However, listed on the following page is a

number of questions which may be discussed with the employees:

1. Who are our present customers?
2. Where do they live?
3. What is their approximate economic level?
4. Where else do they go to eat and drink?
5. What new features, menu offerings might our present customers like?
6. To what new or different potential market segments might our restaurant appeal?
7. What are the wants and needs of these new segments?
8. Will this new potential market segment mix with our current clientele?
9. How does our restaurant compare with others in the area?
10. How is the food quality?
11. How is the service?
12. How does the building and decor compare with the competition?

This is just a beginning for the foodservice operator. A creative operator could easily add dozens more questions to be discussed.

Customers: The focus of the marketing concept is the foodservice's customers. All aspects of the entire foodservice operation should be aimed at satisfying these individuals. The purpose of using an internal marketing information system is to solicit opinions and comments from a restaurant's patrons. This can be done in a number of ways, such as: having the manager talk with a few of the customers, or having service personnel check with the customers. One method which is used frequently and produces good results is the comment card. This is a card which is given to the customers after they have finished the meal, and the purpose is to solicit their opinions and comments concerning the foodservice operation's food quality, service, decor and other factors. Design and

examples of comment cards and other forms of questionnaires are discussed later in this paper.

These three internal sources of marketing information are very valuable. Together they can provide a great deal of useful information with which to make decisions. Historically, foodservice operators generally have failed to utilize these sources to maximum advantage. The current competitive situation within the foodservice industry dictates that all sources of information be used to greater advantage.

External Sources. A foodservice operator also needs to consider a multitude of external sources of data and information. These sources are varied and include trade associations such as the National Restaurant Association, syndicated services such as Gallup and Harris Polls, government publications such as census figures, and also external surveys conducted by or for the individual operator. There are a number of guidelines which should be followed when collecting external information. If these guidelines are not followed, much time, effort and money is likely to be wasted.

1. STATE KNOWN FACTS. Before undertaking an external study, make an accounting of data and information currently available. It makes little sense to conduct an extensive study or pay to have one conducted, only to produce information which is currently available from existing sources. By stating all known facts, a base is established from which to work. This base may easily be established by looking at the internal sources just discussed and collecting all the data available internally, before proceeding with external information gathering techniques.
2. LIST SPECIFIC GOALS AND OBJECTIVES. Once a base of information has been established, a plan must be formulated. Goals and objectives are the start

of this plan. Without these goals and objectives an external study could easily go astray and not gather the information needed by a foodservice operator. The operator needs to ask, "What do I want to learn? What type of information about my customers, my competition, or my own operation would be most useful?". Having answered questions such as these, an operator can then begin to formulate potential questions for a survey which will provide the desired information.

3. COLLECT ALL RELEVANT DATA. More will be discussed later in this paper regarding methods of data collection, but at this point the actual legwork must be done to insure an adequate sample. The information gathered must be both valid and reliable. Validity is defined as, the degree to which the data gathered measures what it is supposed to measure. Reliability is defined as, the degree with which data consistently measures whatever it measures.
4. SUMMARIZE THE DATA. No matter what data collection methods are used, some type of summary or analysis must be done to reduce the data into a workable format. This format may then be used by management to make a variety of decisions.

Types of Data: Primary and Secondary

Primary Data. Primary data is original research which is done to answer current questions regarding a specific operation. An example of this would be the foodservice operator who attempts to ascertain consumer attitudes towards new menu offerings or to solicit consumer value perceptions to increased menu prices or portion sizes. This type of data is very pertinent to an individual operation, but may not be applicable to other situations.

There are a number of advantages to primary data, which include:

1. **Specificity:** This data is tailored to one operation only, and provides excellent data for decision making purposes.
2. **Practicality:** Just as the information is geared towards one operation, it provides solid information which is "real-life" and provides a practical basis on which to base decisions.

Obviously, there are also drawbacks to using primary data, which include:

1. **Cost:** For an individual operator to gather primary data is extremely expensive. To gather information from a city of even 100,000 people may prove to be a monumental task for an operator in terms of time and monetary expenditures.
2. **Time Lag:** Marketing decisions must be made quickly, yet it requires a good deal of time to conduct a thorough marketing information gathering study. While an operator is collecting this information, the competition may be driving the foodservice operator into bankruptcy court.
3. **Duplication:** While primary data is geared towards a specific operation, there may be other sources of existing data which may closely duplicate the information being collected and therefore would be appropriate for decision making purposes.

Secondary Data. This type of data is information already available from other sources. It may include such information as a nationwide average guest check figure, growth patterns of a city, or existing consumer attitude surveys. [The National Restaurant Association has published a series of consumer attitude surveys which pertain to many facets of the foodservice industry. Information concerning these surveys may be obtained by writing to: National Restaurant Association, One IBM Plaza, Suite 2600, Chicago, Illinois, 60611, telephone (312) 787-2525.]

A shrewd foodservice operator will make a thorough check of all available secondary data sources before undertaking the task of primary data collection. Secondary data can save many man-hours and a great deal of money. The major advantages of utilizing secondary data are:

1. **Cost:** It is much less expensive to obtain information from existing sources than to develop entirely new data. These existing sources may make a nominal charge for the information, but it will be much less than the cost of undertaking a primary data collection project.
2. **Timeliness:** Secondary data is available almost instantaneously. A foodservice operator can have access to data very quickly and doesn't have to wait weeks or perhaps months for primary data to be collected, tabulated and analyzed.

Disadvantages of Secondary Data.

1. **Limited Applicability:** A restaurant operator has no assurance that information gathered by others will be applicable to a particular foodservice operation. For example, information gathered in New York regarding menu item popularity may not be useful to an operator located in the Midwest. Information which pertains to one operation may apply only to that operation and will be of limited value to anyone else.
2. **Information frequently out of date:** Managers need current and accurate information on which to base decisions. All too often secondary data is not as useful as ^{it may} it might be because ^{it may} it is not current. For example, a consumer attitude survey concerning restaurant price-value perceptions conducted four years ago would be of little use to a foodservice operator making plans today. During the four year interim,

a great many changes in consumer attitudes are likely to have taken place. These changes in attitude will make the original data outdated and useful only in a historical sense. However, if a foodservice operator were to make use of this outdated data, the results are likely to be less than satisfactory.

3. **Reliability:** Whenever a foodservice operator is using secondary information as a basis for a decision he or she runs the risk that the information may or may not be reliable and accurate. An operator would do well to ask, "Who collected the data and what method of data collection was used?" Information is only as good as the individuals who collect it and the methods they use. If a study is administered in a haphazard manner, the results and conclusions should be viewed with caution.

Sources of Secondary Data.

There are literally thousands of sources for secondary data; these sources are limited only by an operator's own efforts to locate them. Listed below are just a few possible sources to start the list of potential sources.

1. Trade Association such as the National Restaurant Association or the International Food Service Executives Association.
2. City Chamber of Commerce.
3. Trade journals and periodicals such as Food Service Marketing, Institutions, Hospitality-Restaurant, Nation's Restaurant News, Restaurant Business.
4. University bureaus, foundations, and Cooperative Extension Service.
5. Government publications such as census figures, or Small Business Administration publications.

6. Syndicated services such as Harris or Gallup Polls.
7. Public library or University library.
8. City convention or visitors bureau.

Methods of Gathering Information

There are three avenues open to a foodservice operator who wishes to gather information about present or potential clientele. These three methods are:

(1) experimental, (2) observational, and (3) survey. No one method is the best for all situations and each has its own inherent advantages and disadvantages. An operator needs to be very careful to gather only appropriate data which can be used later for decision making purposes. If there is one rule to follow it is this: GATHER INFORMATION AND DATA IN AS NON-BIASED A WAY AS POSSIBLE, AND GATHER ONLY FACTS. Later, when a decision must be made the operator may use personal opinion, intuition, and experience in weighing the pros and cons of the decision. However, when gathering information, just get the facts.

Experimental Method. This is the most formal of the three methods, and finds only limited use in the foodservice industry. When using this method, a researcher divides the sample of people into a number of groups and exposes each group to a different treatment. For example, McDonald's Corporation uses a number of cities across the country as test market centers. In each of these centers McDonald's introduces or "test-markets" new products to obtain customer reaction to these items in order to project future sales of these new items. Sales may then be compared with other test market centers to determine popularity of new and old items. It is quite expensive to conduct this type of study and it is also quite difficult to control all external variables which may affect the outcome of the experiment. An example of an external variable is the weather or the advertising efforts of competitive foodservice operations which

could easily have an effect on the sales volume of new products. Because of the expense, only the large chains such as McDonald's are able to conduct such studies on a regular basis.

Observational Method. The observational method involves observing consumer behavior and making organized notes to document or record the observed behavior. When doing this type of research it is important that all individuals acting as observers make their notes in the same manner. If more than one individual is recording observations it is imperative that a common method of observing behavior and recording information be established. This is done to assure consistency between the different observers. The observational method will not be effective unless it is carried out in the same manner by all observers.

An example of an observational type of research would be the recording of observed reactions of consumers to various personal selling approaches. Suppose that an operator instructed the service personnel to use three different sales approaches for the promotion of wine. Each service person would then be instructed to record the approach used and the customer reaction. After a period of time, perhaps two weeks, the operator could then compare the recorded information of all service personnel and thereby better understand which promotional technique would likely be most effective for future use.

This type of information could be easily used in the foodservice industry. However, the observational method isn't without its drawbacks. The major drawback to this method is that it is difficult to observe and document all relevant behavior reactions. It is also difficult to instruct and train all the observers so that all of them observe and record information in exactly the same manner.

Survey Method. When used properly, the survey method can gather a great deal of useful information for a foodservice operator. The survey method is quite adaptable to a variety of situations and is not too costly. Surveys may be accomplished using a number of methods, such as telephone surveys, direct mail surveys, or personal interviews.

Telephone surveys are the easiest to do and produce very quick results. One major advantage to this type of survey is the cost. No travel is involved and a single individual may contact and solicit answers from a large number of people in a fairly short period of time. On the other hand, there is no face-to-face contact and people are often not inclined to answer questions over the phone. The reliability of the answers received over the telephone is also a question mark.

Direct mail surveys are used a great deal, too. They offer ease of completion and moderate cost as advantages. However, there are two major drawbacks to direct mail surveys. First, the rate of return is normally quite low. Often only 10-20 percent of the surveys are properly completed and returned. This makes it extremely hazardous to base business decisions on such a small return. The risk always exists that those individuals who returned the surveys are atypical. That is, those who return the surveys may not provide answers and opinions which truly represent the majority of the target market segment. Secondly, direct mail surveys do not allow for any in-depth questioning. They do not allow for follow-up questions. The respondent merely sees the written questions and no clarification or follow-up questions are allowed for. This may make it more difficult to generate answers which reflect the complexity of opinion within the target market segments.

Personal interviews allow for more in-depth questioning. An interviewer

normally uses a guidesheet to direct the interview, and the interviewer may adjust the questioning to focus on a point of special interest or to follow-up an answer given by the respondent. There are two drawbacks to the use of personal interviews as a surveying technique. The major drawback is cost. It is extremely expensive to have an interviewer spend a long period of time with one individual in order to gather information. An in-depth interview can last as long as two hours, hence the number of individuals that can be interviewed is limited and the cost per interview is quite high. The cost of travel also makes this type of survey expensive. Secondly, a good deal of training of interviewers must be done in order for them to be effective. In addition, supervision is required in order to have control over the interviewers.

Each of these three methods can be utilized to gather information. A foodservice operator must make a choice based on the need for information, and the advantages and disadvantages of each method. The choice is not always an easy one.

Survey Design

Before a survey is undertaken, a foodservice operator must answer a few basic questions, which are:

1. How many people should be contacted?
2. How should these people be selected?
3. What information is needed or desired?
4. What questions should be asked?
5. Which approach is best - direct mail, telephone, or personal interview?

Sample Design

The first requirement is to define the universe or population. From whom is it that you wish to gather information? The universe or population is simply

a definition of those individuals from which to gather information. For example, two definitions of a population might be:

1. All males and females between the ages of 20-26 who are not married.
2. All males and females who earn more than \$12,000 per year and work within one mile of our restaurant.

The next step or requirement is to determine the number of individuals to survey. This is known as the sample size. The size of the sample really depends on the risk a foodservice operator is willing to assume. As more individuals are surveyed the degree of risk is reduced, because the information gathered is more likely representative of the entire population or universe. The risk is reduced because the information gathered tends to be more valid and reliable as more individuals are surveyed. But the question arises, how many people should be surveyed? This is not an easy question and there is no set answer. As a general rule of thumb, a minimum of 10 percent of the total population or universe should be surveyed in order for the information gathered to have any validity or reliability for decision making purposes.

Having identified and defined the population as well as determined the number of individuals to be surveyed, the next step is to select the individuals and implement the survey. If a survey is to have any usefulness, it must be implemented with great care. A poorly chosen sample isn't likely to produce data and information which represents the opinions of the entire population. Without data and information which is truly representative of the entire population, it is extremely difficult to make a sound decision. Any decisions which are based upon insufficient or inaccurate data are tenuous at best.

One of the most popular methods of sample selection is RANDOM SAMPLING. This

method allows each and every member of a population an equal chance of being selected. Random sampling is probably the best method for a foodservice operator to use when undertaking a survey. It does not guarantee a representative sample, but it comes as close as any available method. The steps to selecting a random sample are simply:

1. Identify and define the population.
2. Determine the desired sample size.
3. List all members of the population.
4. Assign each member of the population a consecutive number starting with zero.
5. Using your finger, select individuals to be surveyed from the listing (close your eyes and point)

OR

Select an arbitrary number from a table of random numbers. The number will correspond with the numbers assigned in Step #4.

6. Repeat Step #5 until enough individuals are selected to complete the desired sample size.

There are two other sampling methods which a foodservice operator should consider. These are: (1) cluster sampling and (2) systematic sampling.

Cluster sampling involves the use of previously formed groups rather than choosing individuals separately. If a foodservice operator surveyed all the patrons eating at the foodservice operation on a particular day or during a specific meal period this would be an example of a cluster sample. The patrons are a cluster. The operator has no control over the selection of the individuals which make up the cluster, but instead is just using the entire cluster as a sample.

Another cluster example would be all the individuals who live in one apartment building.

Systematic sampling is also of potential interest to a foodservice operator. Systematic sampling involves the use of an existing listing of names (often in alphabetical order) and selecting a sample from these names. The steps are simply:

Example

- | | |
|---|---|
| 1. Identify and define the population | 1. The entire population of city XYZ, population 100,000 |
| 2. Determine the desired sample size | 2. 10 percent of the population or 10,000 |
| 3. Obtain a list of the population | 3. Source: Telephone directory |
| 4. Determine what k is equal to by dividing the size of the population by the sample size | 4. $k = \frac{100,000}{10,000}$
$k = 10$ |
| 5. Starting at a random point near the top of the list | 5. Randomly select any name near the top of the list |
| 6. Take every kth name on the list until the desired sample size is reached | 6. Select every 10th name until the desired sample size is achieved |

A foodservice operator might use a phone listing or alphabetical listing of the population for this type of survey.

Once the sample is selected, the next step is to provide these individuals with the survey instrument. A great deal of time and thought needs to go into the development of a successful survey instrument. The following is a series of questions which should help the beginning survey writer.

1. Who does what, when, where, and how?
2. What does the respondent know about the subject?
3. How does the respondent feel about the subject?
4. Why does the respondent act or feel the way they do?

When developing a survey instrument, the writer should make it as clear as possible and as interesting to follow as possible. By starting the survey with easy to answer yet interesting questions, the respondent is more likely to become involved and respond to all of the questions on the survey instrument. Two types of questions may be included in a survey, the open-ended question and the closed-ended question.

An open-ended question should read like the example below:

"Please offer any comments regarding your dining experience with us tonight." (This is followed by a few lines for writing.)

On the other hand, a closed-ended question might also be used, such as the example below:

	Excellent	Very Good	Average	Fair	Poor
QUALITY OF FOOD					
QUALITY OF BEVERAGE					
QUALITY OF SERVICE					

Both types of questions are widely used, and offer certain advantages. An open-ended question allows the respondent to reply with a personal touch given a few brief lines in which to write the answer. This type of survey does make tabulation of responses more difficult. On the other hand, a closed-ended question is easy to tabulate but the respondent has very little choice in terms of response and merely places an "X" on the most appropriate answer.

Open-ended questions are most effective if used to determine subjective opinions, while closed-ended questions are used most frequently to determine objective information and facts.

Surveys are used for a multitude of reasons, and it is difficult to establish any concrete rules that will apply in all situations. However, the following are some general guidelines which apply to the construction of all survey instruments:

1. Avoid the use of technical language. Ask the questions using language the respondent understands and is familiar with.
2. Avoid long and wordy questions. These will tend to discourage the respondent and may reduce the number of respondents to a written survey.
3. Avoid questions which are vague and general in nature.
4. Avoid including more than one idea per question.
5. Avoid personal questions which might embarrass the respondent.
6. Avoid putting any personal bias into the questions.

Surveys are extremely useful to a foodservice operator. They can help gather a great deal of useful information about present and potential patrons. The appendices contain examples of two survey instruments used to gather information.

Marketing Information Systems should be designed for the purpose of producing data which are useful to a foodservice operator. This information can be used as a basis for decisions. However, this information should not be used as the sole determining factor when making any decision. Two other factors also come into play when making a decision. These factors are (1) Experience and (2) Intuition. If all decisions could be based solely on information produced by marketing information systems, there would be no need

for managers. Instead, machines could be used to tabulate the information and then predict the correct answer. However, there are far too many uncontrollable variables to contend with in gathering marketing information or data. For this reason a foodservice operator or manager must view the situation in terms of (1) the marketing information, (2) previous experience in similar situations, and (3) intuition as to what the future holds. Based upon these three factors, a decision must be made and the foodservice operator or manager must accept the final responsibility for the decision.

Conclusion

Marketing Information Systems are used to provide information used in decision making. This information may be obtained from a wide variety of internal and external sources. Data collected may be divided into two categories, either primary or secondary. Information gathering methods include experimental, observational and survey methods. Sample design is a complicated subject, yet in order to assure valid and reliable results precise selection methods must be adhered to. Despite the variety of informational gathering techniques, the foodservice operator must assume the final responsibility for the decisions which are made.

Appendix I

Survey Questionnaire

This questionnaire is a survey designed by a foodservice marketing class. Its purpose is to determine the primary restaurant markets within the city XYZ, USA. Your help will be greatly appreciated. Thank you.

1. In what age group do you fall?

- a. 0-17 c. 26-40 e. 65 or over
 b. 18-25 d. 41-64

2. What is your occupation?

- a. Agriculture d. Professional g. Unemployed
 b. Housewife e. Retired h. Other
 c. Blue Collar Labor f. Student

3. Sex? Female Male

4. Marital Status? Married Separated or Divorced
 Single Widowed

5. What is your average yearly income?

- a. \$0-\$4,999 c. \$10,000-\$14,999 e. \$20,000-\$25,000
 b. \$5,000-\$9,999 d. \$15,000-\$20,000 f. more than \$25,000

6. How many times a month do you go out to eat dinner?

- a. once a week d. more than 5 f. once a month
 b. 1-3 e. once every 2 weeks g. not at all
 c. 3-5

7. What is your average expenditure per person when you go out to eat?

- a. \$1.00-\$2.00 d. \$5.00-\$7.50 g. \$12.50-\$15.00
 b. \$2.00-\$3.00 e. \$7.50-\$10.00 h. more than \$15.00
 c. \$3.00-\$5.00 f. \$10.00-\$12.50

Appendix II

This survey instrument could be used as a guide for personal interviewers as they approach patrons as they left the foodservice operator, called restaurant Y. Because this survey would be administered face-to-face, the majority of the questions are open-ended.

NOTE: Male Female

1. What is your age? 18-25 26-35 31-35 36-40 41-50 51 and above
2. What is your profession or occupation? _____

3. How did you learn of restaurant Y? A friend told me about it, I saw it while shopping in Springview Mall, I learned of it through advertising, other _____.
4. How far did you travel to reach restaurant Y? Less than 2 miles, 2-4 miles, 5-7 miles, 8-10 miles, 11-15 miles, 16 or more miles.
5. Prior to dining at restaurant Y, were you ...shopping, working, at home, other _____.
6. When shopping in Springview Mall, what percentage of the time do you dine at restaurant Y? Less than 20% of mall visits, 20-40% of mall visits, 40-60% of mall visits, 60-80% of mall visits, 80% or more of mall visits.
7. Have you ever heard of TGIF Happy Hour? Yes No
(If yes, go to question 8, if no, skip to question 11)
8. Have you ever patronized TGIF Happy Hour? Yes No
(If yes, go to question 9, if no, skip to question 10)
9. On what days have you patronized TGIF Happy Hour?

Wednesday	Thursday	Friday
-----------	----------	--------
10. What are some reasons why you may not patronize TGIF Happy Hour? _____

11. In comparing the food quality of restaurant Y to other area restaurants, would you rate restaurant Y's food as superior, above average, average, or below average?
12. At what other area restaurants do you usually dine? _____

13. Do you feel that the service at restaurant Y is friendly-enough, or could be friendlier?
14. Do you feel that the service of restaurant Y is fast enough or could be faster?
15. Does the combination of portion size and price represent value in dining out? Yes No
16. Why did you answer (repeat answer to question 15) to the previous question?

17. Do you think the portion sizes of restaurant Y should be increased, should be decreased, should remain as they are?
18. Are there any new foods or beverages you would like to see added to the menu?
19. What did you enjoy most about your visit to restaurant Y?
20. How might the operation of restaurant Y be improved?
21. Do you have any additional suggestions or comments?

Appendix III

Sample Dinner Survey

This independent survey is being conducted by a group of Food Service and Lodging Management students. Your honest answers to the following questions are sincerely appreciated.

Thank you for your time.

1. How often do you dine out for dinner?

3 or more times per week

1-2 times per week

2-3 times per month

once per month

less than once per month

other _____

2. When you do dine out for dinner, what percentage of your dinners are eaten at restaurant X?

less than 10%

11-25%

26-40%

41-55%

56-70%

more than 70%

3. When you dine out for dinner, what percentage of your dinners are eaten at restaurants in city A?

less than 10%

11-25%

26-40%

41-55%

56-70%

more than 70%

4. What other restaurants do you patronize for dinner? _____

5. Are you aware of any of the "special dinners" offered at restaurant X?

Yes

No

Please rate the following by circling your response:

6. SERVICE Fast 1 2 3 4 5 Slow
7. SERVICE Friendly 1 2 3 4 5 Unfriendly
8. PRICE High 1 2 3 4 5 Low
9. PORTION SIZES Large 1 2 3 4 5 Small
10. PORTION SIZES IN RELATION TO PRICE Excellent 1 2 3 4 5 Poor
11. FOOD QUALITY Excellent 1 2 3 4 5 Poor
12. ATMOSPHERE Pleasant 1 2 3 4 5 Unpleasant
13. ATMOSPHERE Formal 1 2 3 4 5 Casual
14. MENU ITEM VARIETY Excellent 1 2 3 4 5 Poor
15. QUALITY OF ALCOHOLIC BEVERAGES Excellent 1 2 3 4 5 Poor
16. Which of the following items would you order if they appeared on the dinner menu? You may check more than one.

- Variable portion size and price Lighter types of entrees
- Salad bar Increased a la carte selection
- Other _____

17. Are you satisfied with the current valet parking arrangements?

Yes No

If no, explain why _____

18. Are you comfortable leaving your car with the valet? Yes No

19. What is your age?

less than 18 18-25 26-35 36-45

46-55 56-65 over 65

20. What is your sex? male female

21. What is your profession or occupation? _____

22. How far did you travel to reach restaurant X?

less than 2 miles

2-5 miles

6-10 miles

11-15 miles

16-20 miles

more than 20 miles

23. What is the total income within your household?

less than \$5,000

\$5,000-\$9,999

\$10,000-\$14,999

\$15,000-\$19,999

\$20,000-\$24,999

\$25,000-\$29,999

\$30,000-\$39,999

\$40,000-\$49,999

\$50,000 and above

Additional Comments and Suggestions: _____

Assignments

1. Develop a questionnaire which could be used to determine future foodservice needs in your community.
2. Develop a comment card to be used in a full-service table cloth restaurant.

Questions for Review and Discussion

1. Cite at least five reasons for implementing a M.I.S. system.
2. Why should M.I.S. be:
 - (a) Objective in nature?
 - (b) Systematic in nature?
 - (c) Useful to management?
3. Cite at least three sources of internal information, and discuss possible advantages and disadvantages to each source.
4. Discuss advantages and disadvantages to both primary and secondary data.
5. Briefly describe the three methods of data collection.
6. How is random sampling done?
7. Write two examples of both an open-ended and a closed-ended question.
8. Do you feel that good marketing information is necessary for success in the foodservice industry? Why or why not?
9. How would you design a marketing information system for an existing foodservice operation?

For Further Study

Robert Ferbe, Handbook of Marketing Research

Ben Enis and Keith Cox, Marketing Classics

