Food Broker Marketing, Operational Practices and Computer Usage

Agricultural Experiment Station, University of Delaware
Misc. Paper No. 1151

by

Catherine Haasch, Degree with Distinction Undergraduate Student
Food & Resource Economics Department
University of Delaware

Angelo DiAntonio, Associate Professor
Accounting Department
Towson University

U. C. Toensmeyer, Professor
Food & Resource Economics Department
University of Delaware

Introduction

The food broker industry is faced with the use of computers in various operational accounts to fulfill their business needs. This project investigates the accounting and marketing aspects of the food broker industry. It also examines the present and future use of computers by food brokers. The answers will be useful to the present computer owner as well as the potential owner.

Careless decisions concerning the acquisition and use of computers may lead to expensive disappointments and a decrease in productivity. Unsatisfactory experiences with computer technology will cause potential users to remain with their present system. There are many advantages to implementing computers. Such advantages are more efficient recording, processing and the cost savings that the food broker would incur.

This study also examines the use of electronic marketing or a computerized trading system. The computerized trading system links buyers and sellers together through remote terminals or microcomputers. A system of this type would allow an unlimited number of buyers and sellers to sellers to negotiate and arrange transportation on the computer. This study does not presuppose that electronic marketing is going to replace people.

Another important topic that this study covers is the Uniform Communication Standards. These national standards were developed for communication and business application for manufacturers, brokers and retailers. The above is a computerized system standardizing operational procedures among the firms in areas such as purchase orders, invoices, credit consideration, and other needs. It may become necessary for food brokers to become part of such a system if they wish to continue to communicate with their clients.

Objectives

1. Determine the use of computers by food brokers.
2. Determine future plans to implement a computer system into food broker operations.
3. Examine the feasibility of incorporating an electronic marketing system into the present food broker operation.

Procedure

A mail survey of food brokers was conducted during the summer of 1984. The master mailing list was obtained from the National Food Broker Association. The questionnaire was mailed nationwide to a random sample of 754 members, which included 20 foreign members.

One hundred forty-five surveys were returned, an 18.7 percent response rate. The findings and conclusions are subject to the limitations of the responses.

Firm Characteristics

The most common organizational structure of the food brokers surveyed was mainly the corporate form. Of the food brokers surveyed, 78.3 percent followed the corporate mode of business while 6.3 percent were organized as a partnership (Table 1).

Table 1

Food Brokers
Organizational Structure
United States 1984

Type	Number	Percent
Corporation	112	78.3
Sole Proprietorship	21	14.7
Partnership	9	6.3
Other	1	.7
Total	143	100.0

Source: Food broker survey and calculations

Almost 32 percent of the survey participants had sales volume of over 35 million dollars (Table 2). This is an important feature if a firm is going to consider purchasing a computerized system. The firm should have sales volume sufficiently large enough so that it is feasible to operate a system.

Table 2

Sales Volume Distribution
Of Food Brokers, U.S. 1984

Sales Categories	Categoried Percent	Cumulative Percent
Less than 1 million	7.4	7.4
1 to 4.9 million	14.8	22.2
5 to 9.9 million	11.1	33.3
10 to 19.9 million	23.0	56.3
20 to 34.9 million	11.8	68.1
35 million and up	31.9	100.0
Total	100.0	

Source: Food broker survey and calculations.

Accounting

Of the firms responding to the survey, almost 50 percent utilized a combination of their own staff and outside help to process their accounting work. Approximately 27.6 percent of the respondents had full-time assistance with their accounting functions (Table 3).

Table 3

Who Does Food Broker Accounting Work, U.S., 1984

Category	Number	Percent
Full-time	40	27.6
Part-time - Your employee	10	6.9
Part-time - Outside service	20	13.8
Combination - Own staff & outside staff	72	49.7
Other	3	2.1
Total	145	100.0

Source: Food broker survey and calculations.

In evaluating their accounting systems, 73.8 percent of the food brokers felt that their present system met their needs (Table 4). None of the respondents were concerned about the accounting system adequately serving the needs of the business. Fifty-two percent of the respondents felt that their present system would serve their needs in the future. However, 36.5 percent did not feel their system would be adequate to meet their future needs.

Table 4

Food Brokers' Evaluation Of Accounting System, U.S. 1984

Items	Yes	No	Unde-cided	Yes-but	Total
Serving needs	73.8	3.4	3.4	19.4	100.0
Five years ago	74.4	12.8	8.3	4.5	100.0
Five years future	52.0	36.5	11.5	----	100.0

Source: Food broker survey and calculations.

When respondents were asked about the reasons for their dissatisfaction with their present accounting system, they cited two reasons most often. The dissatisfaction was that reports were not obtained soon enough and there was a lack of flexibility in obtaining them. Both these deficiencies could be overcome with the implementation of a computerized system.

Of those firms responding, 57.7 percent reported compiling financial statements on a monthly basis (Table 5). Approximately 17.7 percent of the participants prepare quarterly statements and 15.5 percent prepare reports annually.

Table 5

The Frequency of Financial Statements Prepared by Food Brokers U.S. 1984

Frequency	Number	Percent
Monthly	82	57.7
Quarterly	25	17.7
Semi-annually	11	7.7
Annually	22	15.5
Other	2	1.4
Total	142	100.0

Source: Food broker survey and calculations.

Table 6

The Need and Use of Financial Statement By Food Brokers, U.S. 1984

Items	Yes	No	Total
	- Percent -		
More frequent statements	17.4	82.6	100.0
Use for future planning	94.7	5.3	100.0
Analyze past operations	97.8	2.2	100.0

Source: Food broker survey and calculations.

There was a negative indication that there is a need for more frequent statements with 82.6 percent of the respondents being against the idea (Table 6). There was a strong agreement among the participants that the financial statements should be used for future planning according to 94.7 percent of the responses. Additionally, 97.8 percent of the participants used the financial statements to analyze past operations.

Marketing

Food brokers' knowledge concerning the familiarity with the Uniform Communications Standard (UCS) was impressive. Almost 61 percent of the respondents had knowledge of the UCS (Table 7). Further, 42.3 percent of the respondents believe that there were more advantages to the UCS than disadvantages. Also, the participants believed that the UCS would affect broker-buyer relations.

The participants were asked about which characteristics would affect broker-buyer relationships. Thirty-six percent felt that promotion would be affected; another 33 percent thought that retailer control of shelf space would affect the broker-buyer relationship (Table 8).

Electronic Marketing

An important thrust of this study was to determine the knowledge of electronic marketing by food brokers. Approximately 62 percent of the food brokers surveyed had no prior knowledge of electronic marketing systems (Table 9). Only 10.9 percent of the

Table 7

Food Brokers' Knowledge of and Familiarity With Uniform Communications Standard, U.S. 1984

	No 1	2	3	4	Yes 5	Total
			- percent -			
Familiar with UCS	29.8	3.0	11.9	10.4	44.9	100.0
Advantages to UCS	12.8	3.9	23.1	17.9	42.3	100.0
Disadvantages to UCS	34.2	5.1	27.8	7.6	25.3	100.0
Broker-Buyer UCS	19.1	6.4	14.9	20.2	39.4	100.0

Source: Food broker survey and calculations.

Table 8

Food Brokers' Perception of Factors Affecting Broker-Buyer Relationships, U.S. 1984

	No 1	2	3	4	Yes 5	Total
			- percent -			
Scanning-Retailer	31.4	4.9	17.6	13.7	32.4	100.0
Affect-in-store	28.0	6.0	19.0	20.0	27.0	100.0
Retailer-Shelf	14.0	10.0	22.0	21.0	33.0	100.0
Affect-pricing	26.3	11.1	18.2	18.2	26.2	100.0
Affect-promotion	21.0	10.0	17.0	16.0	36.0	100.0
Affect-planograms	18.8	10.9	17.8	21.8	30.7	100.0
Affect-Good ideas news products	27.5	5.5	18.7	20.9	27.4	100.0

Source: Food broker survey and calculations.

Table 9

Knowledge Concerning Electronic Marketing
By Food Brokers, U.S. 1984

	No 1	2	3	4	Yes 5	Total
			- percent -			
Knowledge	61.6	10.1	12.3	5.1	10.9	100.0
Interest	38.0	7.4	25.6	8.3	20.7	100.0
Benefits	26.4	7.3	34.5	10.0	21.8	100.0
Alternative	49.5	12.8	18.3	6.4	13.0	100.0

Source: Food broker survey and calculations.

Table 10

Opinions of Food Brokers As To the Advantages
And Disadvantages of Electronic Marketing, U.S. 1984

Advantages	Disadvantages
1. More accurate	1. Elimination of personal contacts
2. Better distribution	2. Cost
3. Giving trade more power	3. Security
4. Possible cost savings from both buyers and sellers	4. Elimination of food brokers
5. Time and money savings	5. Quality aspect of product
6. Reduce sales costs	6. Reduced emphasis on service
7. One stop shopping	7. Price competition
	8. Loss of control

Source: Food broker survey.

respondents indicated any knowledge of such a system.

The level of interest in electronic marketing is relatively small, with 38 percent indicating no interest and only 20.7 percent showing a definite interest. Benefits as perceived by food brokers were also very small, with 21.8 percent agreeing and 26.4 percent observing no benefits. Most respondents, 34.5 percent, were split between the definite agreement and disagreement. Approximately 49.5 percent indicated that they did not regard electronic marketing as a feasible marketing alternative.

Food brokers' written opinions as to the advantages and disadvantages of electronic marketing are shown in Table 10. The food brokers felt that there were some definite advantages but also very serious disadvantages. Elimination of personal contacts was the most important concern of food brokers. Their industry is one of much personalization and, according to the brokers, the introduction of electronic marketing would cause this aspect to cease. Firms were also concerned with the cost and security. Smaller firms were worried that the cost would be too high for their business. Food brokers were also afraid that tampering with the system would be easy.

Microcomputers

In today's society the efficiency of an accounting system is becoming dependent on the computers that are used by the firms. Approximately 38.5 percent of the participants surveyed have installed a microcomputer system (Table 11). However, 24.6 percent have not investigated the possible use of a microcomputer. Almost 11 percent of the respondents replied that they had investigated the use of micros but found them not to be practical and 14.7 percent have found them to be too expensive for their firms.

Table 11

Number of Food Brokers
With Microcomputers and
Reasons for Not Having One
U.S. 1984

Response	Number	Percent
Presently installed	50	38.5
Investigated but not practical	14	10.7
Investigated but expensive	19	14.7
Have not investigated	32	24.6
Other	15	11.5
Total	130	100.0

Source: Food broker survey and calculations.

The criteria that the brokers used to buy their present computer systems are listed in Table 12. The two most important criteria for choosing a microcomputer were the cost of the system and the increased capability of the system. Faster work turnaround time was cited by 14 percent of the respondents, labor savings 13 percent, increased capacity 12 percent, and user friendly 8 percent.

Food brokers were asked if they believed that there were any material benefits to a microcomputer. Approximately 61.3 percent of the replies were positive in this regard. Conversely, 14.2 percent thought that there were no material benefits of microcomputers and 24.5 percent were undecided.

Table 12

Food Brokers' Criteria
For Buying Their Present Computer System,
U.S. 1984

Categories	Number	Percent
Cost of system	53	16.0
Increased capability	52	16.0
Faster work turn-around time	46	14.0
Internal labor savings	42	13.0
Increased capacity	38	12.0
User friendly	27	8.0
Aggressive marketing	26	7.0
Cost of service bureau	18	5.0
Return on investment	16	5.0
Prestige	9	3.0
Impulse	1	1.0
Total	328	100.0

Source: Food broker survey and calculations. Multiple Responses.

Food brokers' estimated costs to convert to a computerized system are shown in Table 13. Approximately 26.8 percent of the respondents felt that the system they need would cost between $3,001 and $5,000 with another 22 percent indicating between $1,501 and $3,000.

Table 13

Food Brokers' Estimated Cost
To Convert to a Computerized System,
U.S. 1984

Cost Category (Dollars)	Number	Percent
0 - 1,500	11	13.4
1,501 - 3,000	18	22.0
3,001 - 5,000	22	26.8
5,001 - 10,000	17	20.7
Over 10,000	14	17.1
Total	82	100.0

Source: Food broker survey and calculations

The criteria that will be used for buying the firm's future computer system was the subject of Table 14. The cost of the system was indicated by 18 percent of the respondents as the most important criterion followed by increased capability, cited by 17 percent.

How food brokers acquired their software is the subject of Table 15. Of the brokers responding, 49 percent indicated that their software was customized programming by a third-party firm. However, 26 percent indicated that the software was customized in their own firm. Only 6 percent of the respondents got their software from a computer store.

Table 14

Criteria Used by Food Brokers For Buying a Future Computer System, U.S. 1984

Categories	Number	Percent
Cost of system	64	18.0
Increased capability	60	17.0
Faster work turnaround time	54	15.0
Internal labor savings	45	12.0
Increased capacity	41	11.0
Aggressive marketing	28	8.0
User friendly	26	7.0
Cost of service bureau	21	6.0
Prestige	10	3.0
Return on investment	12	3.0
Total	361	100.0

Source: Food broker survey and calculations. Multiple responses.

Table 15

How Food Brokers Acquired Their Software, U.S. 1984

Categories	Number	Percent
Custom programmed by third-party firm	45	49.0
Custom programmed in-house	24	26.0
Off-the-shelf package from software house	11	12.0
Off-the-shelf package from computer manufacturer	6	7.0
Off-the-shelf package from computer stores	5	6.0
Total	91	100.0

Source: Food broker survey and calculations.

There is a definite need for hard copy reports according to the results indicated in the survey. Of those responding to the related question, 38.5 percent stated that reports were needed immediately, with 26.6 percent desiring hard copy reports within a week and 19.3 percent within 24 hours.

The participants were asked to indicate the characteristics that they would deem necessary or desirable to get information. With regards to sales to customers, 93 percent of the food brokers thought that information about the quantity of products is extremely necessary (Table 16).

Table 16

Information About Sales to Customers That Food Brokers Want To Obtain Immediately, U.S. 1984

Categories	Necessary	Desirable
	- percent -	
Price	89.0	11.0
Quantity	93.0	7.0
Shipments	85.0	15.0
Source	70.0	30.0
Grade or quality	43.0	57.0
Size and/or package weight	84.0	16.0

Source: Food broker survey and calculations.

Eighty-nine percent of the food brokers indicated that it was also necessary to get price information immediately and 85 percent deemed information about shipments necessary. Fifty-seven percent of the respondents deemed it desirable but not necessary to receive information on grade or quantity.

The most important information that food brokers wanted to obtain about their "principals'" products was about quantity. Ninety-four percent of the food brokers indicated that quantity was the most important information necessary to obtain, with price second (Table 17). All the categories were deemed as necessary to obtain information about.

Table 17

Information Concerning "Principals'" Products that Food Brokers Want to Obtain Immediately U.S. 1984

Categories	Necessary	Desirable
	- percent -	
Price	92.0	8.0
Quantity	94.0	6.0
Shipments	88.0	12.0
Source	76.0	24.0
Grade or quality	54.0	46.0
Size and/or package weight	87.0	13.0

Source: Food broker survey and calculations.

Summary and Conclusions

Based on the information obtained through the survey, over 78 percent of the food broker firms were corporations with a sales volume of more than 35 million dollars. Sixty-three percent of the respondents had between 1 and 30 out orders daily. Ninety-three percent of the food brokers placed 1 to 20 items within each of these orders.

Over 49 percent of the food brokers used a combination of their own staff and an outside staff to do their present accounting work.

Over 57 percent of the food brokers indicated that they prepare financial statements on a monthly basis and 82.6 percent of the respondents did not want financial statements more frequently. Almost 95 percent of the food brokers use the statements for financial planning and approximately 98 percent of the respondents use the statements to analyze past operations.

It was found that almost 55 percent of the food brokers are familiar with the Uniform Communications Standard (UCS). Approximately 60.2 percent of the respondents indicated that they perceived advantages to the UCS while 32.9 percent felt that there were disadvantages.

Fifty-four percent of the food brokers felt that if the retailer was given control of the shelf that this would affect broker-buyer relationships. Also, 46 percent of the participants indicated that the use of scanning by retailers would affect broker-buyer relationships.

Although many of the respondents were not aware of electronic marketing, approximately 32 percent recognized benefits from such activity. This seems to indicate that it may be worthwhile to pursue the further examination of electronic marketing within the industry.

As a result of this study, there is strong evidence that several of the food broker firms have a need for current, timely and relevant information. We were surprised at the number of the survey participants that did not want frequent financial statements.

A number of food brokers depend on outside assistance for their accounting activity. With the changes in technology, many of these tasks may be performed in-house by their own staff with minimal time and effort in training.

It is noteworthy that our respondents were concerned with cost of acquisition of computers without concern for the attendant cost/benefit that may accompany such a change in their system.

Our survey results indicate that the information processing explosion has had little impact on this industry.

The implementation of technological changes are a process of evolution. There is every indication that a segment of the industry utilizes electronic equipment in their information processing activity. This is commendable and an excellent initial effort.

It will most likely become imperative that the food broker will need to incorporate the marketing system with one such as the UCS and some other forms of electronic communication system(s). Electronic marketing is also not out of the realm of possibilities. Changes in competition and economic practices in concert with education will cause many of the others to review carefully their marketing and accounting procedures.