FreshTrack 1999

The New Dynamics of Produce Buying and Selling

Marketing and Performance Benchmarks for the Fresh Produce Industry

FOOD INDUSTRY MANAGEMENT
CORNELL UNIVERSITY

PMA
Produce Marketing Association

FreshTrack 1999:

The New Dynamics of Produce Buying and Selling

Edward W. McLaughlin
Kristen Park
Debra J. Perosio
Geoffrey M. Green

FOOD INDUSTRY MANAGEMENT
CORNELL UNIVERSITY

PMA™
Produce Marketing Association

Cornell University, Ithaca, New York 14853
Produce Marketing Association, Newark, Delaware 19714

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Abstract

The way in which produce companies do business has changed quite dramatically from a decade ago. Documenting many of these changes is the objective of this report. The report is the third in a series of annual research projects conducted by The Food Industry Management Program at Cornell University for the Produce Marketing Association (PMA). This year the theme is "the new dynamics of produce buying and selling."

The method guiding this study has three principal components: (1) a review of the relevant trade and academic literature on the fresh produce industry, (2) an extensive mail questionnaire directed at produce retailers, and (3) personal interviews with shippers around the United States, including three extensive focus group sessions in the Northeast, Northwest and California.

The Buying Process

- Although the food retail industry is going through a period of unprecedented consolidation, it does not appear from this research that this consolidation has yet had a major impact on the organization of retail produce buying offices. Today, in total, there are more buyers and category managers per firm than ever before. However, it is also true that since there are fewer retail companies than ever before, there appears to be a smaller universe of retail than there was in the past. Today's smaller number of retail buying offices means that each has control over a much-expanded share of overall produce procurement than in years past.
- A produce buyer's job still revolves around supplier negotiations. Furthermore, so does a category manager's. This fact points to a number of possibilities. First, negotiations between more sophisticated buyers and sellers are more complex yet grow in importance as consolidation at both buyers and sellers makes each account more important. Second, most produce buyers are more oriented to the supply side of their business—procurement and logistics—than they are to the demand side and consumers. Third, similarly, despite a marketing awakening of most retail firms in recent years, retailers as a group still appear more prepared to improve their profit picture by trimming product cost than by enhancing final sale conditions.
- Produce buyers from all firms indicate a preference toward purchasing greater and greater quantities of their produce needs direct from shippers.
- Produce executives continue to want to do more of their business with "preferred" suppliers. The percentage of produce purchases procured from a retailer's "top ten" suppliers is expected to continue to rise.
- Although contracts are in favor with retailers, shippers are taking a more tentative approach. This signals a potential trouble spot for shippers who are not currently "geared-up" with the information and experience necessary to make contracting a win-win situation. Those shippers who have developed a positive track record within the contracting arena will be favored as retailers choose their trading partners. While many buyers see only limited downside risk from engaging in contracts, shippers often see a different, arguably more complete picture. They cite certain advantages created by contracts but point to a significant number of disadvantages as well.

Supplier Profile

- Retail produce executives continue to expand their cadre of suppliers. However, at the same time they are utilizing their "top ten" suppliers for greater percentages of their produce purchases than ever before.

- One of the most preferred attributes outlined by produce executives for shippers is "large enough supply to fill demand for a majority of stores." This is a danger signal to small shippers who may not be able to accommodate this request. Responses are required.
- Retailers also indicate a strong preference for year round product supply. This places pressure on shippers to develop a year round supply if they do not already have one.
- Although formal vendor performance guidelines are becoming standardized operating practice among produce buying offices, enforcement appears to be selective.

Produce Department Technology

- Recent use of electronic technology in the produce industry appears to have stabilized. It looks as if concern over the infamous Y2K problem is at least temporarily placing EDI and all other forms of electronic technology on the back burner…at least until early in the year 2000.

Shipper Responses to Industry Change

- **Expand control, horizontally or vertically.** Firms in virtually every industry are consolidating, particularly at buyer levels. More consolidation in food retailing is sure to follow. In order to compete and be able to supply the new, larger volumes required by many of today's larger customers, suppliers need to consider expansion in one or more ways.
  - **Consolidate horizontally.** Acquire, merge and/or form alliances with other shipper organizations. Means should be found to coordinate with other shippers to obtain the supplies necessary to do business with ever larger wholesale and retail accounts. Organizational opportunities include: joint sales agencies, various forms of cooperative activity, contracting, and new creative equity alliances.
  - Become a multi-region and/or multi-commodity shipper. This means expanding the product line by extending into new commodities and/or new geographical regions to become more of a "one-stop-shopping" source of supply on a more of a year-round basis.
  - **Integrate vertically.** Although vertical alliances are common in produce among growers, packers and shippers and between wholesalers and retailers, there have been very few attempts at vertical organizations that bridge the gulf between shipper and wholesaler/retailer. Yet such innovative arrangements may be breathe fresh air into traditional industry structure. Moreover, many growers may be well served by considering aligning themselves more formally with packing and selling companies. If agricultural production companies are not adding value in meaningful ways, they will be able to claim only whatever system residual is left, if any, after others have extracted their returns.

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Acknowledgments

We had substantial and essential help in preparing this report. First, we are grateful to the Produce Marketing Association for its confidence in asking us to conduct this multi-year research project. The PMA staff, its Board of Directors, and Retail Board provided all the support needed while always ensuring that this industry project be carried out independently by Cornell University.

Next, we would like to especially thank the industry "steering committee" who gave freely of its time to review draft questionnaires and to share insights regarding appropriate interpretation of the study results.

A number of individuals were instrumental in producing the report. Janelle Tauer and Steve Kern provided artistic and graphical expertise in a highly professional and timely manner. We offer them our heartfelt thanks.

Finally, we owe a great debt to the produce industry members who patiently filled out thousands of pages of surveys and answered an equal number of interview questions out of a genuine interest of improving the performance of their industry. Although they were guaranteed anonymity, we thank them individually and collectively. Without their participation, this report would not have been possible.

Foreword

Understanding the buying and selling practices of an industry is as essential to individual firm success as it is to improving the systemwide efficiency and performance of the entire industry. This is particularly true when economic and structural changes take place. Such is the case with today's fresh produce industry. Stimulated by continued increases in consumer demand and by technological advance, the volume of fresh produce flowing through marketing channels has grown significantly over the past twenty years. Moreover, the structure of the channels themselves has changed. Over the last decade, particularly, consolidation has been the watchword in virtually every industry, at virtually every level. This, too, characterizes the fresh produce system as we approach the Year 2000.

This report is the third in an annual series of "benchmark" studies conducted each year by Cornell University's Food Industry Management Program in cooperation with the Produce Marketing Association. The report sets out to accomplish two goals: to identify industry benchmarks and to explore one particular topic in depth. First, certain "benchmark" measures are tracked each year to assist produce industry executives in understanding the opportunities and challenges that are inherent in their changing industry. The measures have been developed through extensive interviewing and mail surveys with executives and organizations at virtually all levels of the produce industry. Second, this year "buying and selling practices of the produce industry" has been investigated in more depth. This indepth topic follows-up on much of the research findings of the *FreshTrack* reports over the past two years, as well as earlier Cornell University research on the "role of the supermarket produce buyer" reported in 1994.

We hope you find the report provocative and useful as you plan your own company's future. We encourage you to contact us if you have any questions.

Edward W. McLaughlin
Professor of Marketing
Cornell University
ewm3@cornell.edu

Bryan Silbermann
President
Produce Marketing Association
BSilbermann@mail.pma.com

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SECTION 1

Introduction

Study Rationale and Methodology

"Dynamic" is perhaps the perfect descriptor for today's fresh produce system. One needs only to pick up the latest newspaper or magazine to read about the importance of fresh fruits and vegetables in consumers' diets. Awareness of the value of health and nutrition has never been higher among consumers. Good health has become more than a passing fancy; it constitutes a fundamental change in how consumers look at themselves, their productivity at work, and how they lead their lives. Moreover, produce industry structure at virtually all levels has become more concentrated.

Traditional patterns of food shopping and preparation are responding to changes and shifting in basic ways. Fresh produce comprise an important part of the changes. The fresh produce industry is responding to the signals from consumers: larger retailers are stocking an increasing number of fresh fruits and vegetables and are doing so on more of a year-round basis; wholesalers and distributors are busy adding value in new ways; and growers and shippers are innovating with new varieties, production and handling methods and transport techniques. In short, the way in which produce companies do business has changed quite dramatically from a decade ago.

Study Goals and Objectives

Documenting many of these changes is the objective of this report. This report is the third in a series of annual research projects conducted by the Food Industry Management Program at Cornell University for the Produce Marketing Association (PMA). In 1996, the Board of Directors of the PMA determined that the produce industry lagged behind certain other major food industry sectors of the U.S. food system with respect to a knowledge of its own marketing and performance measures. The belief was that certain systemwide "benchmarks" were needed in order to chart where the industry had been and how far it had

progressed. Such information would provide the foundation to identify industry needs and opportunities and to speculate about future industry directions. The Board therefore initiated this research study, known as *FreshTrack*, which is conducted annually, to meet this industry need.

This year's study has two overarching goals. First, the study proposes to establish a series of marketing, operational, and performance measures to be used for planning and evaluation purposes for both private firm managers and public policy makers who serve and interact with the produce industry. These performance measures or benchmarks are tracked over time in order to develop an accurate picture of industry status, detect new developments in the industry, and signal changes in industry direction and operating practices. In this study, benchmarks and industry projections are reported in many cases for three distinct years: five years ago (1994), the present (1999), and five years from now (2004).

Second, each year one specific theme is identified for indepth examination. The theme may pertain to all industry members or it may affect one particular segment more than another. This year the theme selected, in conjunction with the PMA professional staff and our industry steering committee, is "The new dynamics of produce buying and selling."

Study Approach

The method guiding this study has three principal components: (1) a review of the relevant trade and academic literature on the fresh produce industry, (2) an extensive mail questionnaire directed at produce retailers, and (3) personal interviews with shippers around the United States, including three extensive focus group sessions in the Northeast, Northwest, and California.

The mail questionnaire to retailers was developed in concert with a steering committee of twelve produce executives—selected with the help of the professional staff of the PMA—as representative of the many different facets of the fresh produce industry. The questionnaire was pretested with industry members before the initial mailing. The final questionnaire was mailed to a sample of 237 produce retailers on April 6, 1999. The most common job titles were: produce directors, vice-presidents of produce, and produce buyers. The individuals and their mailing addresses were obtained from a variety of sources: *Supermarket News: Retailers and Wholesalers;* the PMA; and Cornell University's own proprietary mailing list of food retail companies. The design of the questionnaire, as well as the mailing procedures, conformed to the Total Design Method (TDM) as established by Dillman (1978).

Cornell University has conducted a number of research projects describing produce retailers and has already established numerous benchmarks from these studies which were conducted in 1994, 1997, and 1998. Therefore, a quantitative survey was written exclusively for retailers, because comparisons could be made between the current project and the earlier studies and progress and changes would be more easily measured. However, one cannot talk about buying practices without simultaneously talking about selling practices. Hence, dozens of interviews were held with produce shippers around the nation. These interviews were conducted in two stages. First, early interviews were conducted to identify many of the critical issues to be included in the mail survey. Second, shipper interviews and focus group interviews were conducted. These later interviews were used to understand changes taking place within the shippers' selling offices, and assisted in interpreting the retail survey results. No attempt was made at pure statistical randomness in selecting executives for this qualitative data collection effort, yet the resulting sample of shippers was, in fact, chosen in part for its representativeness and geographical dispersion—as well as for operational and commodity diversity.

The survey generated 56 useable questionnaire responses, representing a balanced sampling both geographically and in terms of size distribution. Respondents ranged from a number of single-store operators to the very largest of multi-billion-dollar retail operators. Such representativeness allows for a

cautious generalization from the survey results to the produce industry as a whole.

A final methodological note: in certain cases, we compare this year's retailer responses to those of retailers in surveys we have conducted in several different years, even though the respondent groups were not uniformly the same. However, the large number of respondents in all of the surveys reported herein generates industry averages in such a way that benchmark comparisons can be made fairly among various years.

Organization of the Produce Industry

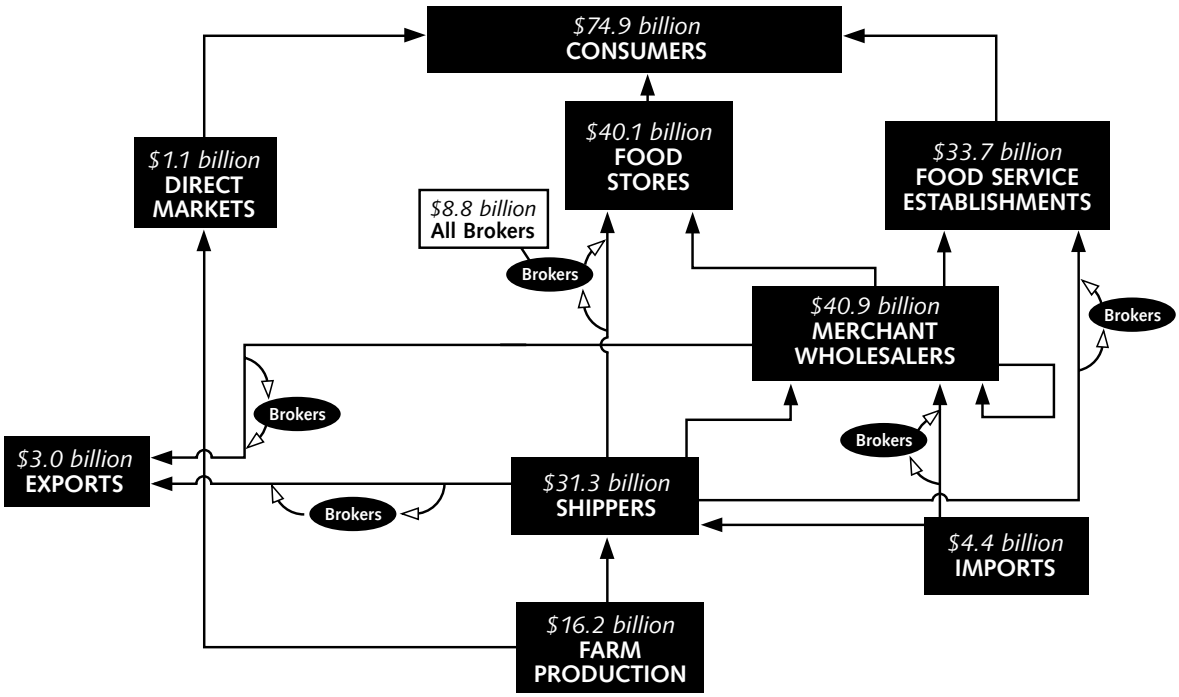
The fresh produce distribution system has evolved rapidly in recent years. Industry structure has changed at virtually all levels and many practitioners, too, have changed their roles and responsibilities to keep pace. Moreover, the dollar volume of fresh fruits and vegetables moving through the distribution channels has continued to grow both in nominal and real (inflation-adjusted) terms.

Figure 1.1 is a simplified schematic of the distribution channels though which fresh produce flows from farmer to consumer. The approximate values of the fresh fruits and vegetables flowing through these channels in the mid to late 1990s are indicated.

Of the three primary outlets by which produce may reach the consumer, note that the food retail outlet currently accounts for the largest dollar volume. It is this channel that mostly determines the focus of this study. For the reader interested in more detail about the methodology used to arrive at the estimates in Figure 1.1, as well as a description of the roles and responsibilities of the produce firms at the various levels, please see the Cornell University report entitled *Changing Distribution Patterns in the U.S. Fresh*

FIGURE 1.1

U.S. Fresh Fruit and Vegetable Marketing Channels, Mid/Late–1990s



Source: 1992 Census of Agriculture, 1994, unpublished data from the Economic Research Service (USDA), trade data, and Cornell estimates

Produce Industry: Mid/Late-70s to Mid/Late-90s (1999). The paragraphs below provide a brief summary.

In the most recent Census of Agriculture (1992), there were over 116,000 orchards and 61,000 vegetable and melon farms in the United States. Taken together, the value of the fruit and vegetable production on these farms was approximately $16.2 billion. This figure represents approximately a fourfold increase from the production value in 1975. Imports added $4.4 billion to the value of U.S. produce production in the mid-1990s and, when including the packing and selling charges of produce packer-shippers, the overall value of all fresh fruits and vegetables sold from U.S. shipping point markets was about $31.3 billion.

Approximately $3 billion worth of this domestic supply is exported in the mid/late-1990s. Roughly $40.9 billion worth of produce is distributed by various merchant wholesalers and $40.1 billion is sold by supermarkets, convenience stores, specialty food markets, and other food retailers. In total, foodservice establishments—fast food, chain restaurants, white table cloth restaurants—account for about $33.7 billion of produce sales, slightly less than its retail counterpart. Finally, although important to certain growers for certain commodities during certain, generally brief, periods of the year, the spectrum of "direct marketing" activities—roadside stands, farmer markets, U-Pick farms, etc.—does not amount to a significant percentage of U.S. fresh produce volume. Although data are hard to come by for this highly fragmented channel, we estimate the total value of the fresh produce marketed to be about 1 percent of the industry total.

Organization of This Report

The remainder of this report is organized in the following way. First, the results of this year's *FreshTrack 1999* retailer survey are presented and analyzed. Integrated into the presentation of these results are comments and observations both from and about the supply side of the produce industry. These insights come from our ongoing personal interviews with shippers from the series of shipper focus groups held across the country in the spring and summer of 1999.

Finally, the report and study are summarized at the end of the report with a listing of the strategic implications and industry perspectives that emerge from the *FreshTrack 1999* study.

SECTION 2

Empirical Results and Perspectives

This section reports on the empirical results obtained from a mail questionnaire sent to supermarket retailers throughout the United States. At each retail firm, produce executives were asked to complete the questionnaire by describing their produce department strategy, operations, and management structure for three points in time: 1994, 1999, and 2004.

Throughout this report, survey results will be presented in several ways. In all cases, the mean results will be displayed. In selected cases, the results will be disaggregated by firm size. That is, the firms participating in the study will be divided by annual company sales into one of three categories: less than $300 million (<$300M), between $300 million and $1.5 billion ($300M - $1.5B), and over $1.5 billion (>$1.5B) in annual company sales.

The empirical results and analysis of the study are categorized into four principal themes:

- Produce Department Profile
- The Buying Process
- Supplier Profile
- Produce Department Technology

Further, the reactions, perspectives, and implications developed from shipper interviews and focus groups are featured throughout the discussion of each principal theme.

At the conclusion of each major theme, perspectives and implications of the results are elaborated and summarized. Finally, strategic perspectives and conclusions are discussed at the completion of this report.

Produce Department Profile

Produce departments vary across many dimensions—variety, size, composition, and profitability. Each of these components will be examined in this section, which focuses on developing a profile of the supermarket produce department.

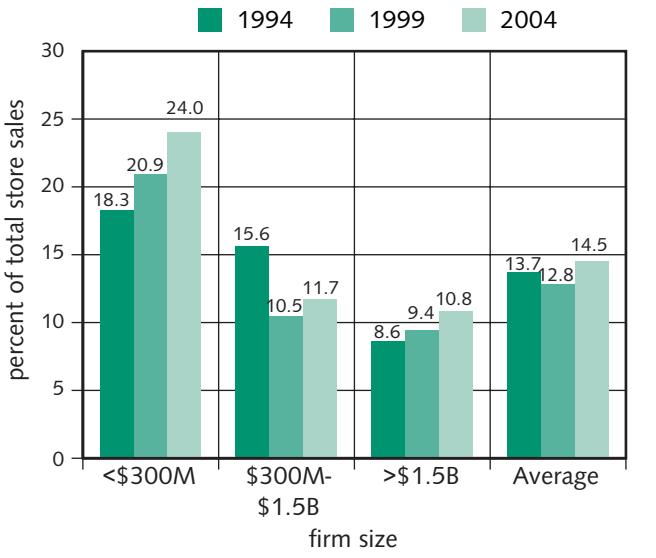
Financial Profile

On average, a supermarket company's total produce sales are $385 million in annual sales; however, annual produce sales in large firms reach an average of $923 million. Produce sales in firms with annual sales of less than $300 million average $38 million while mid-size firms average $59 million in annual produce sales.

Produce executives participating in this study indicate that, on average, their produce departments currently contribute 12.8 percent to total store sales. This number has declined slightly from 1994 (13.7%). By 2004, however, produce executives in this study expect the produce department to account for 14.5 percent of store sales (Figure 2.1).

FIGURE 2.1

Produce Sales as a Percent of Total Store Sales, by Firm Size



Produce executives representing large firms report the smallest percent of store sales originating from the produce department. Currently, 9.4 percent of store sales is generated by the produce department, up from 8.6 percent in 1994, and that percentage is expected to rise to 10.8 percent by 2004 (Figure 2.1).

Produce executives representing firms with annual sales between $300 million and $1.5 billion report that today 10.5 percent of storewide sales flows from the produce department (Figure 2.1). This number is down significantly from 5 years ago when it peaked at 15.6 percent but is expected to recover slightly to 11.7 percent by 2004.

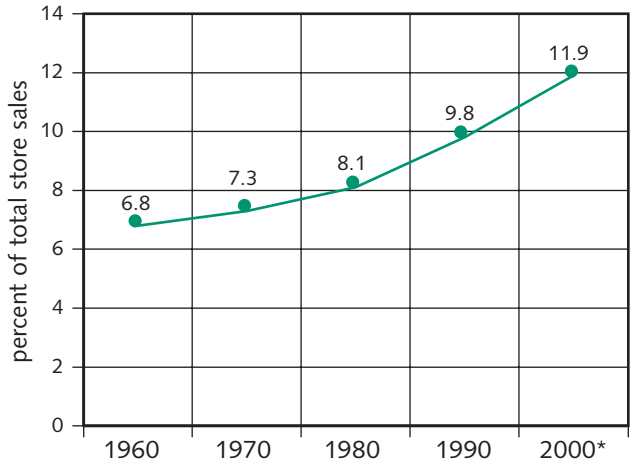
Generally, produce departments in firms with sales less than $300 million contribute the greatest percentage to overall store sales. In 1994, 18.3 percent of store sales accrued from the produce department. Today, that number has grown to 20.9 percent and is expected to reach an incredible 24.0 percent in just five years (Figure 2.1).

In contrast to the other two firm sizes, small firm buyers indicate the highest percentage of sales originating from the produce department. This could be a function of two things. First, the development of "signature" produce departments supported by strong merchandising and marketing efforts can catapult the produce department forward in terms of importance and subsequent sales. Second, smaller retailers may not have the number of ancillary departments (specialty cheese, general merchandise, etc.) within the supermarket that large retailers now consider standard. A small store may only have ten departments compared to the 25 common in many of today's superstores. Therefore, each department within the smaller supermarket accounts for a larger proportion of the total, resulting in higher departmental averages than is possible in a large superstore.

Historically, the produce department played a more minor role within the supermarket. McLaughlin and Perosio (1994) reported on produce department sales distribution from 1960 to 2000 (Figure 2.2). Four decades ago, produce accounted for just 6.8 percent of store sales; however, in each decade since it steadily grew in importance and in 1991 was projected to reach 11.9 percent by 2000.

FIGURE 2.2

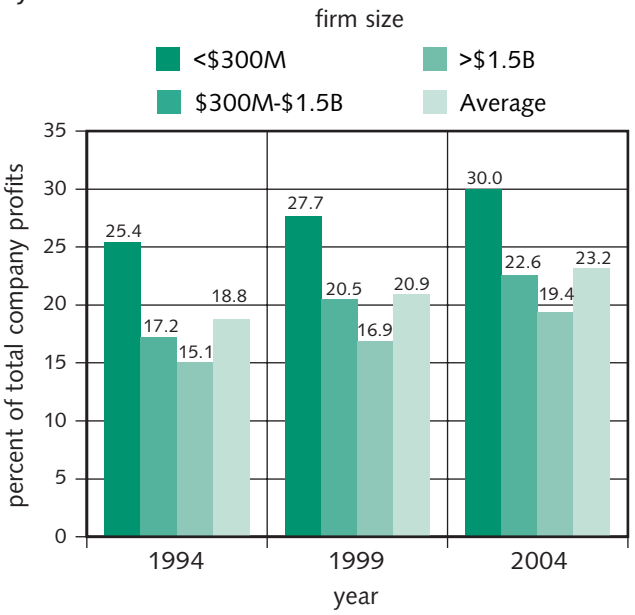
Produce Sales as a Percent of Total Store Sales, 1960–2000



Source: McLaughlin and Perosio, 1994

FIGURE 2.3

Produce Department Share of Company Profits, by Firm Size



FreshTrack 1999 respondents continue to be optimistic about the future of the produce department. Indeed, produce department sales as percent of total store sales already exceed those previously predicted for the Year 2000 (12.8% vs 11.9% respectively). Current respondents predict that in just five years produce sales will swell to 14.5 percent of store sales.

The produce department is very profitable for the supermarket. On average in 1999, produce's share of company profits is 20.9 percent, substantially higher than the level of produce's retail sales share (12.8% from Figure 2.1) (Figure 2.3). It would thus appear that additional produce sales could make a substantially positive contribution to company profits.

Small retail firms report the highest figures for produce's share of company profits for each year, coming in at 27.7 percent in 1999 and expected to rise to 30.0 percent of company profits by 2004. Produce executives from large firms indicate lower profitability levels—perhaps because they have many additional departments vying for a piece of the profitability pie. Currently, the average produce department represented by large firms contributes 16.9 percent to company profits; however, this figure is predicted to grow to 19.4 percent by 2004 (Figure 2.3).

Department Size

Regardless of firm size, retail produce departments continue to grow. Firms with sales of less than $300 million expect to nearly double their produce department size from 1994 to 2004, increasing from 1,697 square feet in 1994 to 3,133 square feet by 2004 (Figure 2.4).

Produce executives from mid-size firms report produce departments averaging 3,027 square feet in 1999 and expect produce to command a larger footprint by 2004, growing to 3,573 square feet (Figure 2.4).

As might be expected, large firms have the largest produce department, averaging 4,274 square feet today and increasing to 4,534 square feet by 2004.

It appears that senior management has recognized the importance of the produce department both in terms of customer demand and store profitability.

FIGURE 2.4

Produce Department Size, by Firm Size

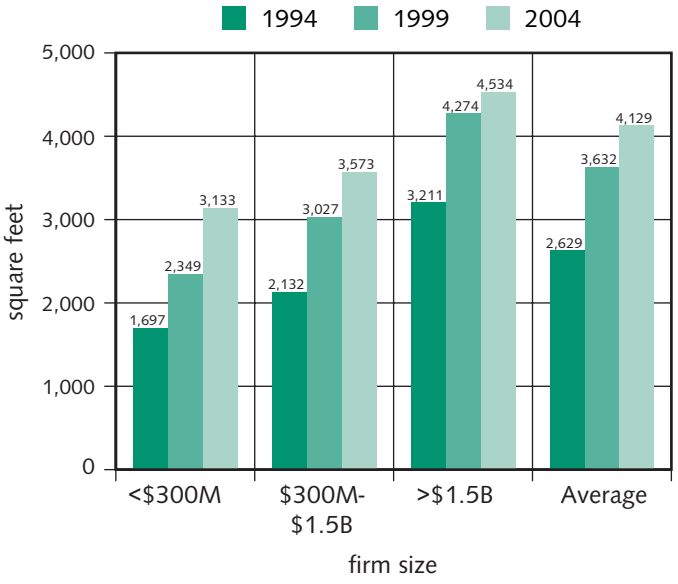
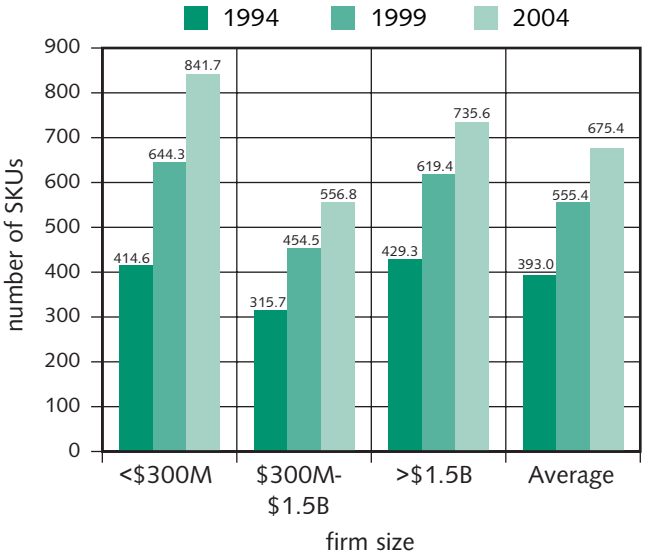


FIGURE 2.5

Number of Produce Warehouse SKUs, by Firm Size



According to *Progressive Grocer*, the average supermarket has increased in size from 25,607 square feet to 28,155 square feet in four years (1994 vs. 1998). Using these figures along with the average produce department size as reported by *FreshTrack 1999* respondents, the produce department as a percent of total store size has increased from 10.3 percent in 1994 to 12.9 percent in 1999.

Warehouse Stock Keeping Units (SKUs)

Produce executives have a vast array of items available to them whether through a wholesaler, direct from a grower/shipper, or via a broker. The average retail firm in this study reports having access to 555.4 SKUs in the warehouse (whether their own warehouse or from a general-line grocery wholesaler's warehouse), up from 393 in 1994 (Figure 2.5). This number is expected to continue to rise to 675.4 by 2004.

Retailers from firms with annual sales of less than $300 million report having had access to 414.6 SKUs in 1994, 644.3 today, and expect a dramatic increase of almost 200 SKUs to 841.7 SKUs in five years (Figure 2.5).

FreshTrack 1999 respondents from mid-size firms expect to see a steady increase in the number of produce SKUs available to them. They report having had access to 315.7 SKUs in 1994, 454.5 SKUs today, and predict this growth will continue reaching 556.8 SKUs by 2004 (Figure 2.5).

As would be expected, large firm buyers have access to a large number of SKUs, primarily from their own warehouse. Currently, these buyers report having 619.4 SKUs, a figure dramatically higher than just five years ago when just 429.3 SKUs were available to them (Figure 2.5). Following predictions for all other firms sizes, these large firm buyers predict a rise in the number of warehouse SKUs by 2004 increasing to 735.6 SKUs.

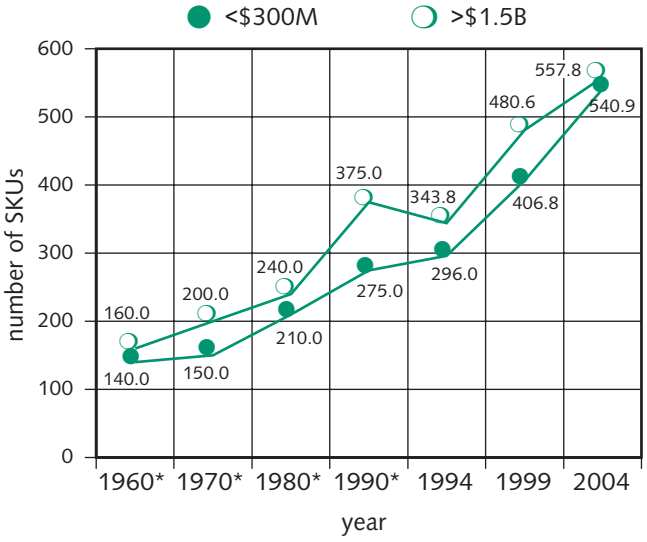
Store SKUs

The number of items or SKUs in the produce department has shown dramatic growth over the last four decades. McLaughlin and Perosio (1994) reported on item growth from 1960 to 1990 for both small firms and large firms. Looking back almost forty years, a typical produce department carried just under 200

items. However, item growth has been quite impressive over the decades, climbing to nearly 400 items for large firms by 1990. Today, *FreshTrack 1999* produce executives from large firms report an average of 480.6 SKUs in the store and forecast that this number will dramatically increase to 557.8 SKUs by 2004 (Figure 2.6).

FIGURE 2.6

Number of Retail Store Produce SKUs, 1960-2004



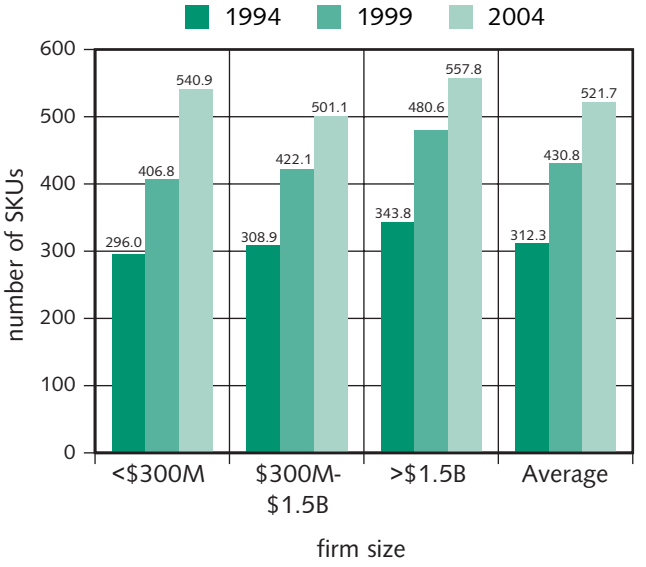
*McLaughlin and Perosio, 1994

Buyers representing small firms have fewer produce items in their stores, largely due to smaller produce departments (2,349 square feet vs. 4,274 square feet for large firms). Although these buyers report having had only 296 items in the produce department in 1994, in just five years time they added substantially to their offerings, increasing to 406.8 items (Figure 2.7). By 2004, these executives predict their average produce department will offer 540.9 SKUs.

Mid-size firms currently offer their customers 422.1 items in the produce department, up from 308.9 in 1994 (Figure 2.7). However, like their counterparts throughout the retail supermarket industry they, too, expect to have more SKUs in the produce department by 2004—501.1 SKUs to be exact.

FIGURE 2.7

Number of Retail Store Produce SKUs, by Firm Size



Lifestyle Trends Favor Produce

The food consumption patterns of Americans have changed significantly in the last 25 years. In 1996, the average American consumed 21 percent more fresh produce (54 pounds), 90 percent more poultry (31 pounds), 15 percent less red meat (20 pounds), 37 percent fewer eggs (73), and 22 percent less fluid milk (7 gallons) than in 1970 (see figure below). A variety of factors is responsible for these changes; among them are sociodemographic changes, changes in consumer food preferences, and the proliferation of new products. In particular, these demographic and lifestyle changes have been good news for the produce industry.

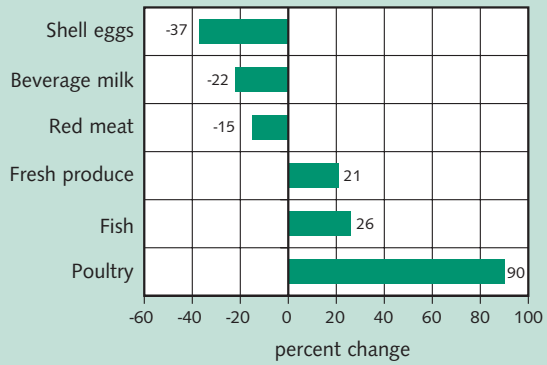
Sociodemographic Trends

Three sociodemographic trends driving changes in food choices include an aging population, more two-income households, and greater ethnic diversity. As the U.S. population ages, Americans are no longer willing to spend their retirement years sitting back in their rockers. They are increasingly active and are

continued ☛

looking for foods that help prevent disease, lengthen their life, and improve the quality of life in their retirement years. Many of the items sold in the produce department fit into this new lifestyle of aging baby boomers. Since produce is typically low in fat, high in vitamins and minerals, and contains substances like beta-carotene that reduce the threat of disease, it is a perfect food choice to promote health and well-being.

Percent Change in Per Capita Consumption 1970–1996



Source: U.S.D.A., *Food Review*, September-December 1997

The number of two-income and single-parent households has increased in the last 25 years. The increased labor force participation rate of women is one of the major social and economic phenomena of our time. According to the U.S. Census Bureau (1998), in 1970 only 43 percent of women were in the labor force. Currently, that number is over 60 percent. For those women aged 35 to 44, the rate is nearly 80 percent. Meal preparation has been one casualty of time-starved families and individuals. Today, families do not have the time to prepare traditional meals, but they do have the extra income to pay for convenience. Often, they are looking for food items based on value rather than price. This has led to the development of fresh-cut fruits and vegetables and prepackaged salads, as well as the introduction of salad bars and meal solutions areas, both of which rely heavily on produce, in many supermarkets.

According to the U.S. Census Bureau (1998), in the first half of the 1990s, the non-Hispanic white population grew only 3 percent. At the same time, the minority population grew 15 percent—but not at an equal rate for all groups. The Asian–American population burgeoned by 31 percent, the Hispanic population grew 20 percent, and the number of African Americans grew by 8 percent. Each group is increasing its population not only through births, but also through immigration. Nationwide, about one in eleven residents is an immigrant. These ethnic groups tend to use large quantities and many varieties of fresh produce in their cooking. To better meet the demands of these diverse groups, food retailers have increased the variety of produce items sold in their stores.

Changing Food Preferences

American consumers are developing an upgraded palate. As the country becomes more ethnically diverse, Americans are exposed to more varieties of cuisine. They are also looking for new ways to cook traditional favorites by adding different herbs and spices. As was noted above, many of these ethnic cuisines are produce intensive. Furthermore, the additional flavors being sought in traditional foods are coming from the produce aisle, such as garlic and peppers.

Americans are paying more attention to dietary and health recommendations designed to help them make food choices that promote health and prevent disease. As seen in the figure, the losers are eggs, red meat, and milk. The winners are produce, fish, and poultry. Americans are clearly moving away from high fat and high cholesterol foods and moving towards leaner varieties of meat and lower fat varieties of milk. Moreover, since produce items have the advantage of being low in fat and offer beneficial nutrients sought by consumers, the produce department has benefited from this heightened concern over diet and health.

New Product Introductions

As Americans increasingly embrace national health authorities' recommendations of consuming five servings of fruits and vegetables a day, their array of fresh choices continues to widen. The typical supermarket fresh produce department carries two-and-a-half times as many items today as in the mid-1970s. Increases in domestic production, rising imports, and improved storage facilities afford year-round availability of many fresh foods. Fresh-cut fruits and vegetables, prepackaged salads, locally grown items, and exotic produce have been introduced or expanded in the last decade to meet growing consumer demand.

Convenience items continue to grow within the produce department. A few years ago the fresh-cut salad category had only a few players—the one-pound salad mix, the Caesar, and a handful of others. Today, consumers can choose from salad mixes like oriental, chef, Italian, taco, ranch, spinach, southwestern, organic blends, low-fat varieties, and more. According to *Progressive Grocer*, sales of prepackaged salads and pre-cut fruit as a portion of total produce department sales have increased from 6.5 percent in 1994 to 11.4 percent in 1998.

While the overall market for fresh fruits and vegetables has expanded in the last 25 years, it should be noted that the mix has changed. Traditional varieties have lost share to specialty varieties, and exotic produce has gained favor. For example, per capita consumption of iceberg lettuce fell by 5.4 pounds (19%) between 1989 and 1996, while per capita consumption of romaine and leaf lettuces increased 2.8 pounds (78%) during the same period (U.S. Department of Agriculture, 1997). In addition, many specialty lettuces not yet tracked by USDA gained in popularity because of their inclusion in prepackaged salad mixes. Similarly, citrus fruit consumption has dropped 2.6 pounds (9%), while that of tropical fruits (kiwi, mangos, and papayas) has increased 1.9 pounds (575%). ◆

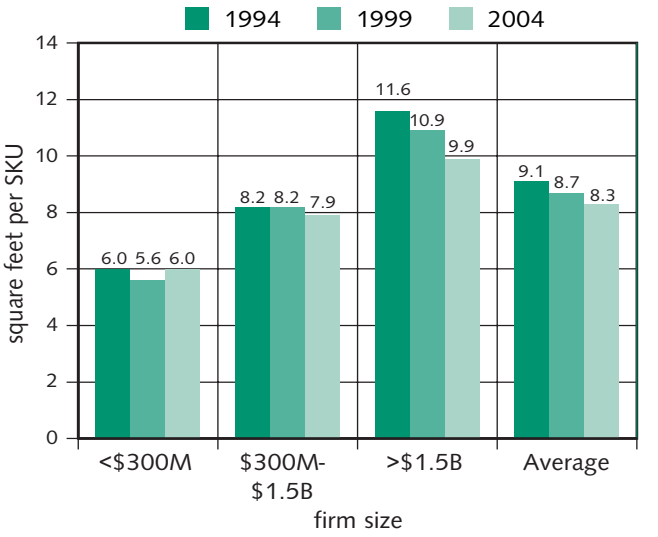
Impact of Size and SKUs

While the size of the average produce department and number of SKUs within the department both continue to grow, they are growing at different rates. The average firm stocked 9.1 square feet per SKU in 1994 and decreased that number to 8.7 square feet today (1999) (Figure 2.8). Consequently, fewer facings per SKU may be available. Firms expect this number to continue to decline slightly to 8.3 square feet per SKU by 2004.

In 1994 large firms stocked their average stores using 11.6 square feet per SKU; however, today that figure has declined to 10.9 square feet per SKU (1999) (Figure 2.8). By 2004 these executives expect a further slight decline to 9.9 square feet per SKU.

FIGURE 2.8

Number of Retail Store Square Feet Per Produce SKU, by Firm Size



Although medium size firms stock their departments using fewer square feet per SKU than do their large firm counterparts, they report little change over the 10-year period from 8.2 in 1994 to 7.9 square feet per SKU in 2004.

In contrast, produce executives representing small firms may be sacrificing square footage in favor of SKUs. Small firm buyers report stocking produce at 6.0 square feet per SKU five years ago (1994) and at 5.6 square feet per SKU currently (1999). This is substantially less than the stocking ratio for large firms. Small firms predict a slight increase in the future, to 6.0 square feet per SKU in 2004 (Figure 2.8).

Balance of Fresh and Non-Fresh Items

Produce executives were asked to indicate the number of non-fresh SKUs in their produce departments. The average produce department currently carries 115.2 non-fresh items, up from 90.3 in 1994 and expects to further increase to 134.2 non-fresh items in 2004 (Figure 2.9). Buyers representing small firms report having 94.8 non-fresh items in their produce department today, while produce departments representative of mid-size retailers have 98.8 non-fresh SKUs. Produce departments representative of large firms typically have 136.0 non-fresh items.

Regardless of firm size, all executives predict growth in the number of non-fresh SKUs in their produce departments. However, as the number of non-fresh items grows, the number of fresh items is also growing—only faster. In 1994, 71.1 percent of total produce SKUs were fresh. Today that percentage has increased to 73.3 percent fresh and is expected to grow further to reach 74.3 percent in 2004 (Figure 2.10).

FIGURE 2.9

Number of Retail Store Non-Fresh Produce SKUs, by Firm Size

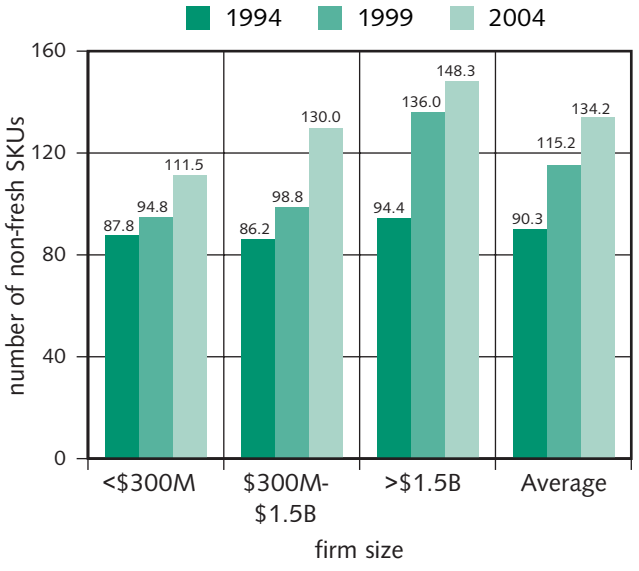
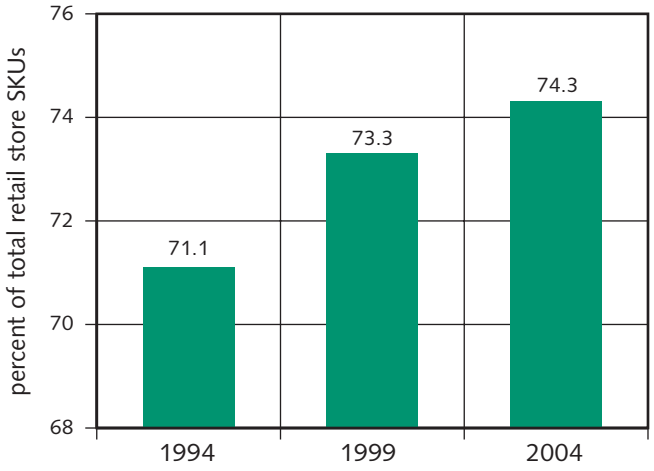


FIGURE 2.10

Fresh SKUs as a Percent of Total Retail Store Produce SKUs



Produce Department Profile: Summary and Perspectives

- The produce department is extremely profitable. In fact, when compared to its share of store sales, its profitability is considerably higher, suggesting that carrying even more produce might make a positive contribution to company profits.
- Today's produce is commanding a larger proportion of the store footprint than in the past.

Produce departments are growing at a faster rate than supermarkets.

- In some cases, in an effort to expand the variety in the produce department and despite increasing department size, produce facings for individual items are shrinking in favor of additional SKUs. Since SKUs at both the warehouse and store continue to grow, it is reasonable to expect further compression of SKUs as produce managers squeeze ever greater numbers of items into a produce department, creating less visually impressive displays and difficulty in keeping items in stock.
- Despite more and more non-fresh items finding their way into the produce department, fresh items are still being added at a faster rate, suggesting a continued commitment of produce buyers and category managers to keep the department primarily fresh.

SECTION 3

The Buying Process

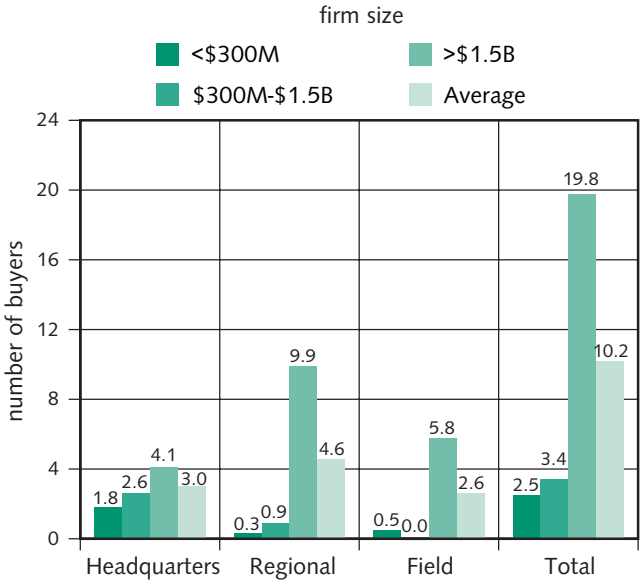
Buyer Profile

Survey respondents reported an average of 10.2 produce buyers per retail company (Figure 3.1). These buyers are primarily located at three points throughout the distribution system—an average of 3.0 buyers at headquarters, 4.6 buyers in regional or divisional offices, and 2.6 buyers located in field offices. As would be expected, larger firms tend to have more buyers closer to the growing areas as well as more regional buyers. In fact, the largest companies, those with sales in excess of $1.5 billion, have almost twice as many total buyers as the average firm at 19.8 buyers. In contrast, small (sales <$300M) and medium size companies (sales $300M - $1.5B) are quite similar—generally having fewer than a handful of total buyers for their entire organization. Of course, since these companies procure a large portion of their produce from wholesalers (for a detailed discussion on procurement practices see section below), a large cadre of buyers is not often necessary.

Despite the continued trend toward consolidation of the retail food industry, it does not appear yet to have impacted the number of produce buyers. McLaughlin and Perosio (1994) documented the number of produce buyers in 1994 in a similar study and revealed an average of 5.8 buyers per firm: 2.2 at headquarters, 2.3 regional buyers, and 1.3 field buyers. Today, just five years later, this number has

FIGURE 3.1

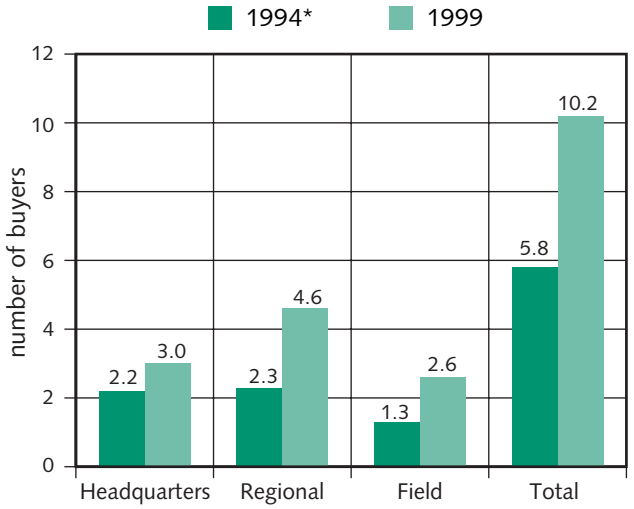
Number of Retail Produce Buyers, by Firm Size



almost doubled to an average of 10.2 buyers per firm (Figure 3.2). Regional buyers have made the greatest strides beyond doubling in numbers in just five years. Perhaps as the wave of consolidation creates larger retail supermarket companies that are spread over greater geographic distances, regional/divisional buyers have become a necessity of doing business. In fact as consolidation creates bigger firms, one would expect to see more buyers per firm, as is currently reported by *FreshTrack 1999* respondents.

FIGURE 3.2

Number of Retail Produce Buyers, 1994 and 1999



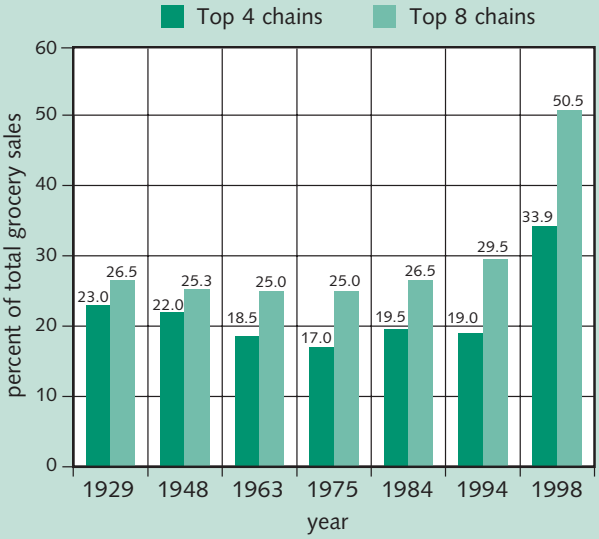
*McLaughlin and Perosio, 1994

A Glimpse at Retail Consolidation

The rapidly rising consolidation at the retail level of the food business has been the single most widely discussed story in the industry over the past few years. Speculation is endless about which companies will merge next. Rumors abound. It is therefore appropriate to examine the evidence. Just how much of a change has occurred? And what is the current status?

The figure below indicates the market share of the leading four and leading eight food retailers since 1929. One observes a remarkable stability before 1998—three percentage points difference for the top eight chains in over the 70 years is virtually flat. However, beginning in 1998 leading retailers began to forge alliances at a rate that was unprecedented. Suddenly, the top eight food retailers have gone from accounting for less than 30 percent of all U.S. food sales to accounting for nearly 50 percent. This is a non-marginal change. How did this happen so suddenly? Simply put: driven by global retailers such as Wal-Mart, Carrefour, and Ahold, retailers around the globe, including those in the United States, are busy attempting to align themselves with the dwindling number of premium retailers in each market area. The strategy is to build company size to take advantage of whatever economies of scale exist in the grocery industry. The top 10 such deals in the United States are listed for 1998 in the adjacent table. Moreover, several new acquisitions already made or in progress in 1999 figure to propel the retail industry concentration to still higher levels by the end of this year and beyond. Most industry analysts predict that a new level of retail stability is unlikely to be reached for at least several more years.

Sales of Top 4 and Top 8 Supermarket Chains, as a Percent of Total Retail Food Sales



Source: *Chain Store Guide* (various years) (Cornell Calculations)

Top Ten Grocery Deals in 1998

Acquirer (volume before acquisition in $ billion)	Acquired (volume before acquisition in $ billion)	Combined value ($ billion)
Kroger (28.2)	Fred Meyer (14.9)	43.1
Albertson's (16.0)	American Stores (19.7) Buttrey (0.4) Sessells (0.2)	35.7
Safeway (23.7)	Carr Gottstein (0.5) Dominicks (2.3)	26.5
Ahold USA (14.3)	Giant Food (4.2)	18.5
Supervalu (17.2)	Randalls (0.5) Tidyman's (0.3)	18.0
Loblaw (17.2)	Provigo (3.9)	11.1
Soobey's (2.1)	Oshawa (4.4)	6.5
Richfood (3.8)	Shoppers Food Warehouse (0.4) Farm Fresh (0.6)	4.2
AWG (3.2) Spartan Stores (2.5)	Falley's (0.3) Ashcraft (0.1)	3.5 2.6

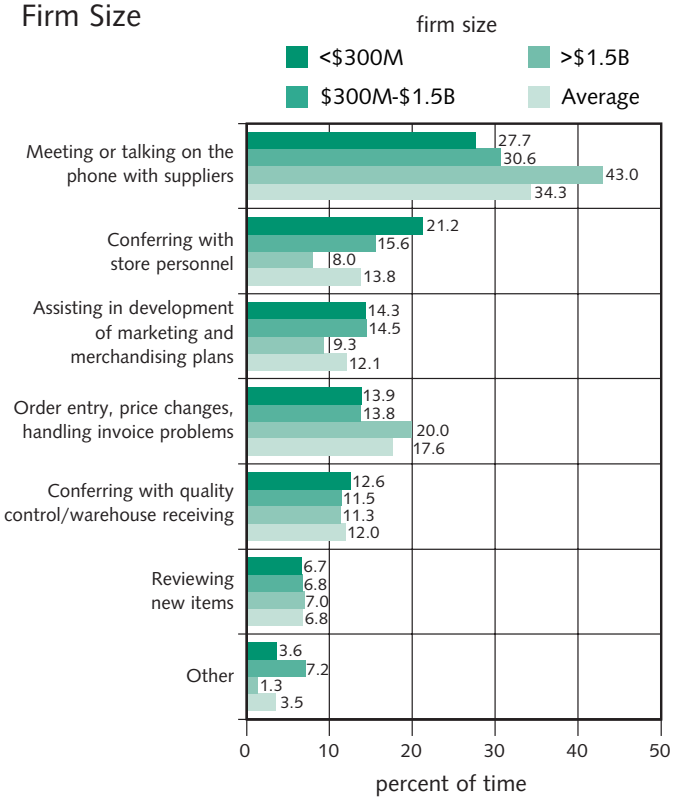
Source: *Supermarket News*, 1999

Buyers' normal responsibilities range from negotiating with suppliers to merchandising to conferring with quality control personnel. The average produce buyer spends the largest part of the work day (34.3%) meeting and/or talking with suppliers (Figure 3.3). Order entry/price changes consume 17.6 percent of each day, while conferring with store personnel and quality control and assisting with marketing/merchandising plans account for somewhat smaller amounts of time. Only 6.8 percent of a produce buyer's time is spent reviewing new items. This is in contrast to their counterparts in the grocery department where new product introductions play a more important role. Fredericks and McLaughlin (1992) reported that grocery buyers devote 13 percent of their time to reviewing new items.

However, firm size does significantly impact a buyer's job responsibilities. Buyers from small firms (sales <$300M) can be characterized as generalists in nature. A "typical" day for these buyers entails overseeing or engaging in a greater number of tasks over the course of the day. The two most important functions for the small firm buyer are meeting and/or

FIGURE 3.3

Retail Produce Buyer Job Responsibilities, by Firm Size



talking with suppliers and conferring with store personnel, 27.7 percent and 21.2 percent respectively (Figure 3.3). Following close behind are: performing order entry/price changes, assisting with marketing/merchandising plans, and conferring with quality control.

In contrast, a buyer from a large firm (sales >$1.5B) spends almost half (43.0%) of his/her work day meeting and talking with suppliers, while all other roles are much more minor (Figure 3.3). This discrepancy in job responsibilities is perhaps to be expected since buyers representing large firms deal with many more suppliers than small firm buyers who purchase a large percentage of their produce from a fewer number of wholesalers.

However, times have changed and so have the job responsibilities of produce buyers. McLaughlin and Perosio (1994) reported that buyers representing large firms spend 36.0 percent of their time meeting and talking with suppliers and 13.0 percent of their time conferring with store personnel (Figure 3.4). Today, large firm buyers spend more of their time meeting and talking with suppliers (43.0%) and less of their time (8.0%) conferring with store personnel. All other job functions have remained quite similar over the past five years.

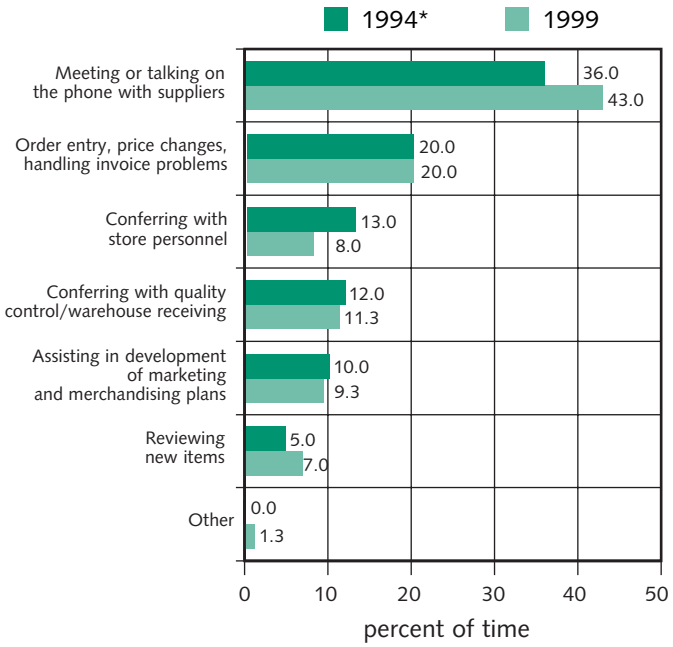
In contrast, five years has not significantly altered the job of produce buyers employed by small firms (sales <$300M) (Figure 3.5). Today they are spending slightly more time reviewing new items (6.7% vs. 4.0%) and slightly less time performing order entry and price changes (13.9% vs. 17.0%). All other job responsibilities have remained fairly constant.

Category Management in the Produce Department

McLaughlin and Perosio (1994) reported that 67 percent of produce buyers were not using category management. Twenty-two percent reported using category management, while 11 percent indicated that they were considering using this new initiative sometime in the future (Figure 3.6).

FIGURE 3.4

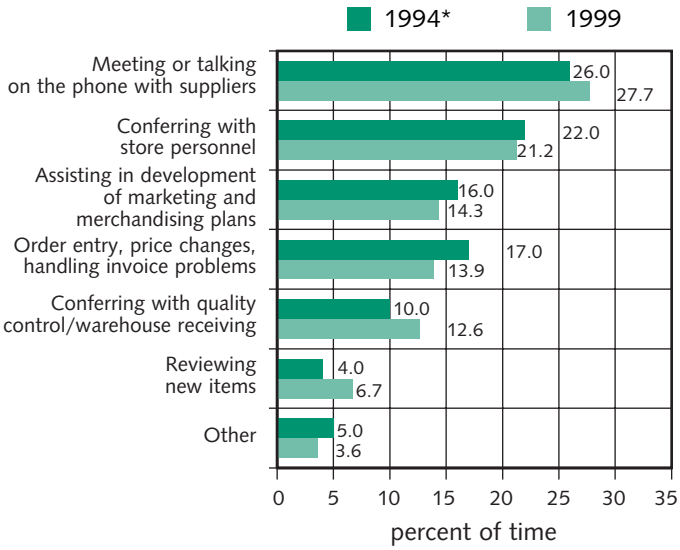
Retail Produce Buyer Job Responsibilities for Large Firm Buyers, 1994 and 1999



*McLaughlin and Perosio, 1994

FIGURE 3.5

Retail Produce Buyer Job Responsibilities for Small Firm Buyers, 1994 and 1999



*McLaughlin and Perosio, 1994

FIGURE 3.6

Use of Category Management in the Retail Produce Department, 1994

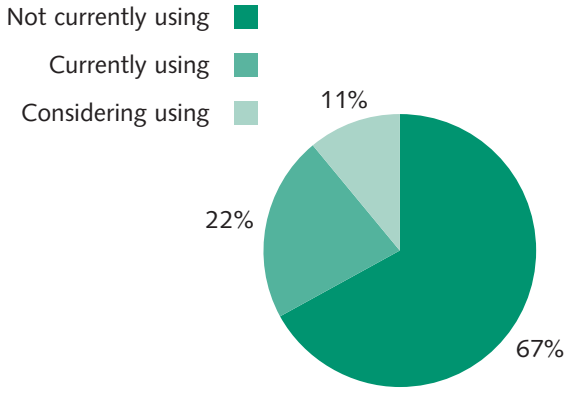
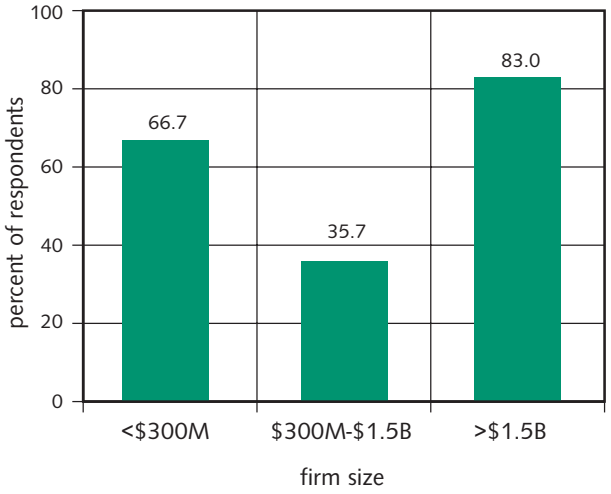


FIGURE 3.7

Percent of Firms with Produce Category Managers, by Firm Size

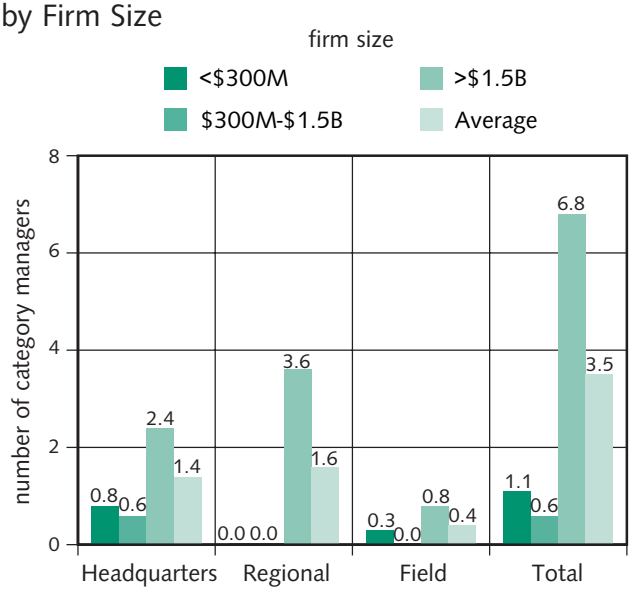


Times have changed. Today, 83.0 percent of large firms have produce category managers, while 66.7 percent of small firms report having category managers, and only 35.7 percent of mid-size companies employ these category specialists (Figure 3.7).

An average firm in this study reports having 3.5 produce category managers (Figure 3.8). As expected, the large firms have the most category managers. While the number of category managers ranges greatly for these firms (from 0 to 27), the average number of category managers for firms with sales in excess of $1.5 billion is 6.8 (Figure 3.8). In contrast, small firms report having 1.1 category managers and mid-size firms average less than one category manager per firm (Figure 3.8).

FIGURE 3.8

Number of Retail Produce Category Managers, by Firm Size



Where Are the Category Captains?

Category management in the retail produce department has had to face numerous hurdles. Most of these have involved ways to manage fuzzy data from variable weight produce sales and from limited product identification capabilities. Today, however, many retailers are committing themselves to understanding the role of category management in produce, and they are finding ways to implement detailed category management plans.

In the grocery aisles, brand-name market leaders—such as Nabisco, Nestle, and Procter & Gamble—often

continued ☛

fill the role of the category captain. They provide essential market share information and detailed consumer purchase and product use information. Using retail scanner data furnished by syndicated data suppliers (IRI, AC Nielsen), they furnish retailers with product assortment and shelf layouts to maximize category profits. Is this the future role of the produce supplier?

Shippers are divided in their opinions about their role in produce category management. The large majority of shippers interviewed for this study indicated that low margins severely limit their ability to perform market analyses and new product research like their grocery counterparts. In the words of one, "I suppose it is coming but don't know how to do it without it costing an arm and a leg." The requests from retailers for category management help have been slow in coming, perhaps because retailers recognize how difficult captaining a produce category may be. A lettuce shipper indicated, "On the commodity side, I can say that it (category management) is virtually nonexistent."

A minority of shippers had plans to develop category management programs. These shippers may be divided into two groups: those who are currently developing information for use by category managers, and those who anticipate doing so in the future. Both of these groups of shippers see advantages in acting as the information provider rather than relying on their retail customers to dictate preferences.

In the future, the latter group of shippers anticipated being able to manage the category for the customer and allow buyers to shift their focus to other value-added activities. One tactic is to build their product mixes to reflect the category needs of their customers in order to provide them with a complete category catalogue of produce. Shippers of specialty products in particular saw the benefits in becoming category captains, enabling them to provide planograms, suggest pricing, provide new packaging ideas, and recommend displays for their specialty items.

A few large shippers acknowledged that they have already moved into the category management arena. "More and more (customers) are relying on category management information such as variety suggestions and when to plan promotions." Shippers who do support category management activities for use by their retail customers are swift to provide information on consumer trends, market analyses, space allocation recommendations, and new product research. "We're learning a lot about what effect promotions have, what price points really work, what effect salad promotions have. Sometimes if you put a number of different items on sale, you kill the whole category. You may have lifted the sales great in one area, but you have pulled the whole category sales down."

Even though the majority of shippers said they do not have the appropriate information to support category management, they acknowledge the importance of the issue. Even those who are currently and planning to use category management admit that category management is difficult to implement. A shipper summed up her feelings of ambivalence: "We're pretty limited in what we can do with category management. It's almost non-existent. I think that it is important, especially in the fresh-cut category. The only way we really manage it is through brokers and merchandisers."

At this point in time, however, it must be said that because of the expense of providing information needed to support retail category management in the same manner as the grocery vendors, suppliers are moving cautiously and in small incremental steps. ◆

Category managers perform a variety of job responsibilities. Typically, the two job functions which consume the greatest amount of their time are negotiating with suppliers/developing alliances (17.5%) and working on sales/profit/market share goals (19.2%) (Figure 3.9). The job responsibilities which absorb the least amount of their time are determining investment buys and working on budget development and/or compliance.

It is interesting to note the relatively high percentage assigned to "other," particularly for small firms (16.3%) (Figure 3.9). This illustrates a common industry challenge when new initiatives are developed—to agree upon a common definition of an initiative such as category management. When asked to define "other," retailers included such responsibilities as "training and development" and "activities preformed at store level."

In addition to describing the responsibilities of category managers, *FreshTrack 1999* respondents were provided a list of common grocery category management activities and asked, "Are any of the following category management activities being used in your company's produce department?" On average, over 50 percent of produce executives report using each of the listed activities. In fact, most activities are currently employed by two-thirds to three-quarters of all produce departments that currently engage in category management (Figure 3.10). The most common

FIGURE 3.9

Retail Produce Category Manager Job Responsibilities, by Firm Size

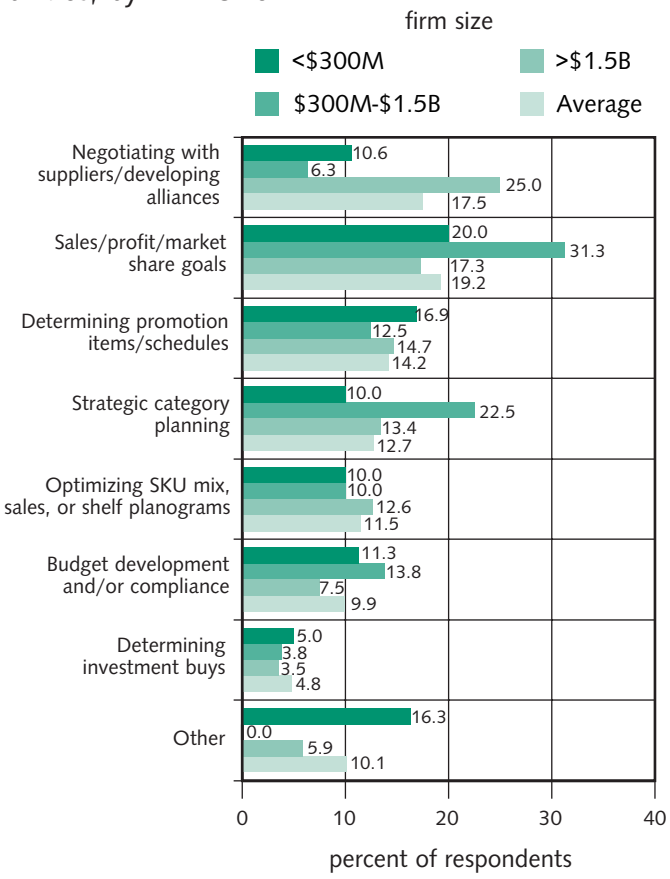
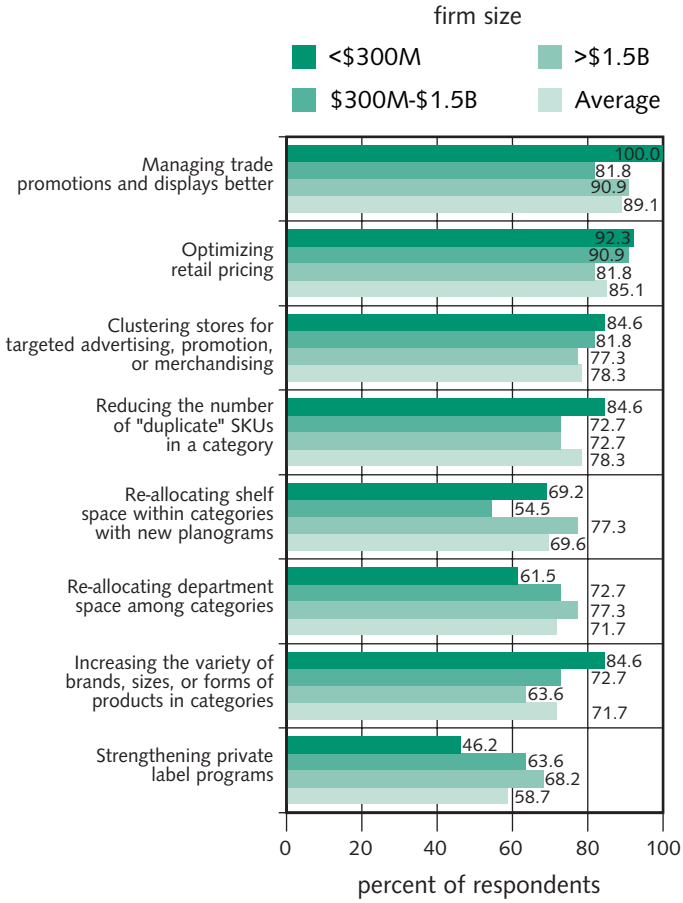


FIGURE 3.10

Applications of Category Management in the Retail Produce Department, by Firm Size

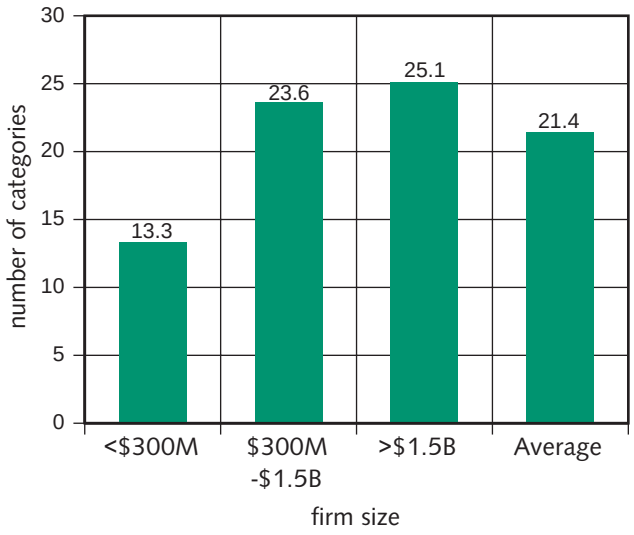


activities include managing trade promotions/displays and optimizing retail pricing. Fewer companies (but still an average of 58.7%) report using category management to help them strengthen their private label programs.

The final question asked relating to category management was "How many categories do you currently have?" The average produce department has 21.4 categories (Figure 3.11). Produce executives from small firms reported an average of 13.3 categories, while executives representing mid-size firms have 23.6 categories. *FreshTrack 1999* respondents from large firms indicate having the most categories—25.1.

FIGURE 3.11

Number of Retail Produce Categories, by Firm Size



The Supplier's Role in Category Management

For shippers interested in forming a strategy to help category management at the retail level, Mark A. Boyer, from PMG, Inc., a consulting firm specializing in the perishables area of the retail grocery industry, recommends that shippers start by collecting the following information and answering the associated questions:

1. Consumer information. Who uses the category, why they use it, how often they use it, and their key purchase-influencing criteria. What are the substitutable items to the category? The affinity items? This information is extremely helpful in the plan development process.
2. Market level data. How big is the market for the category? Who are the leaders? The followers? Can any share data be developed or mined?
3. Category dynamics. Is the category growing or shrinking? Why? Are there external influences that impact the category? Weather, farming intentions, and health trends are a few examples.
4. Category profitability. How can the retailer optimize the category within his store mix? Provide examples of where and how the category has proven successful. Share your experiences, both good and bad, in other markets.
5. Pricing data. Provide examples of the elasticity of the everyday retails for the category. Which promotions seem to be most effective? Which are the stinkers? ◆

(from: Boyer, Mark A. "The Supplier's Role in Category Management." *Supermarket Business*, New York, NY, November 1998.)

Trade Associations Help Fill the Gap

Since shippers do not individually have the resources of the major grocery brands, their trade associations can frequently play a role in providing category management information to retailers. As a matter of fact the trade commissions for decades have provided merchandising, POS materials, and promotions focused on selling the "category" of products produced by their members.

Two of the associations for commodity commissions which have had significant experience with category management and which have been frequently recognized as leaders are the National Cattlemen's Beef Association and Washington Apple Commission.

The National Cattlemen's Beef Association

In 1993, The National Cattlemen's Beef Association (NCBA) engaged the NPD Research Group to collect data on meat purchases as part of NPD Group's ongoing consumer Diary Panel. These data, which compose the Meat Purchase Diary, have tracked existing consumer meat purchases and cover share performance, price points, and deal levels by cut and species, on both a regional and national basis. These provide information about how the consumer shops for meat that has hitherto never been collected.

In addition, the NCBA has been hard at work developing Uniform Meat Identity Retail Standards (UMIRS) and then convincing retailers to use them in their stores. The Standards are necessary to try to collect universal and uniform data on sales of random weight meat items. Recently, the NCBA, along with Information Resources Inc., (IRI) has collected standardized data from three retailers in each of 7 different market areas. With these data they have been able to develop more accurate market level reports.

The Washington Apple Commission

Early investigations into category management by the Washington Apple Commission suggested that produce could benefit from the basic concepts of category management, but some changes needed to be made to the grocery model to take into account the unique characteristics of the business. Today, with over 30 U.S. retail partners, the Washington Apple Commission manages an "Apple Category Management" program, which has received the Supermarket Business Category Captain's Best of Class award since its inception.

The program involves partnerships between the Washington Apple Commission and retailers, with the goal to maximize the performance of the entire apple category. Retailers are providing weekly pricing, cost-by-item, and sales to the WAC which then creates a national and regional composite against which they can measure themselves.

With this information, retailers are starting to measure such things as profitability of square footage of displays and to track category trends. In addition, the Washington Apple Commission helps retailers assess their current business, benchmark their performance against a national and regional composite, and develop annual plans and scorecards from which to measure performance and quarterly business reviews. It is a fact-based process, which involves the individual partner's goals and enables the Commission to develop customized programs and support to facilitate the category growth.

The category management program also provides benefits to non-partner retailers through "Apple Category Best Practices." The strategies and tactics, which are most effective at driving the apple category, have been identified within the category management database. These recommendations have been classified under assortment, pricing, promotions, and merchandising and are included in a retailer manual.

To deliver information and benefits back to the industry the Commission has developed shipper/marketer workshops. In addition, a quarterly report provides a recap of retail sales nationally, which is then broken down into five regions. Shippers can see what varieties sell in what parts of the country, and if changes are occurring within the make-up of the category. Information on retail pricing, ad activity, and competitive fruit is also provided. ◆

Sources of Produce

Produce is typically purchased by supermarket buyers by means of five major sources: grower/shippers, produce wholesalers, general-line grocery wholesalers, brokers, and importers. Survey respondents indicate that 61.0 percent of all produce is currently shipped directly from the production areas to supermarket buyers, whether the transactions are actually consummated by shippers' sales people or brokers (Figure 3.12). Produce executives report that five years ago (1994) a remarkably similar percentage was shipped direct from grower/shippers or via brokers (59.7%). At that time, however, brokers played a larger role than they do today—23.6 percent of sales in 1994 vs.18.1 percent of sales today. As these executives look toward 2004 they predict a slight increase in purchases from grower/shippers and via brokers, rising from 61.0 percent today to 64.5 percent in 2004, again with a further shift away from brokers and towards grower/shippers.

Firms with sales of less than $300 million continue to purchase a large percentage of their produce from produce wholesalers—42.9 percent of all purchases in 1999—down slightly from 43.2 percent in 1994 (Figure 3.13). However, as these executives look toward the future (2004) they anticipate purchasing somewhat less from their produce wholesalers (38.6%) and more directly from shippers (35.5% in 2004 vs. 27.3% in 1999). Produce procured from a general-line grocery wholesaler is predicted to remain quite stable at current levels—between 12 and 13 percent. Produce executives currently utilize brokers to secure 16.2 percent of their purchases; however, this number is expected to decrease to 12.9 percent of purchases by 2004.

FIGURE 3.12

Sources of Produce for Retailers, by Year

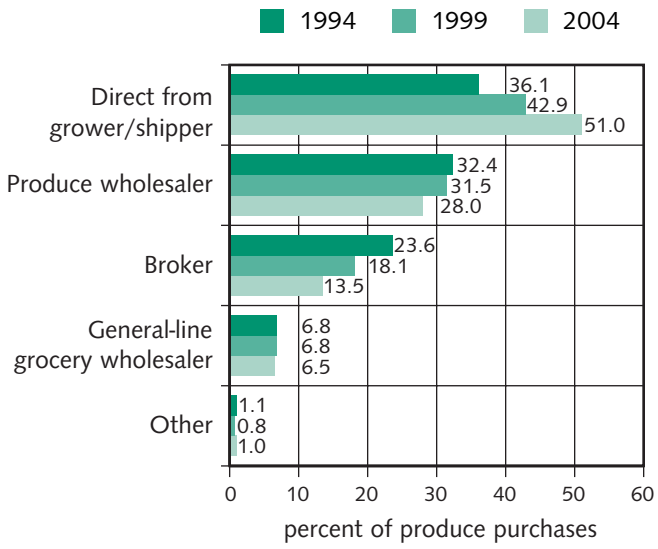
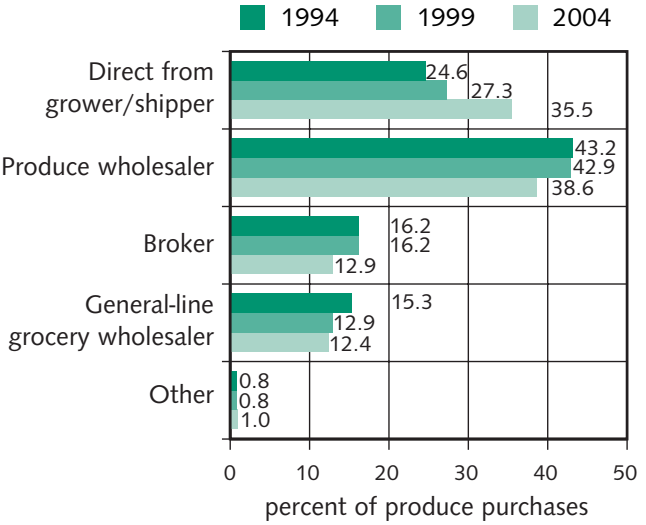


FIGURE 3.13

Sources of Produce for Small Retailers, by Year



Produce executives representing mid-size firms (sales $300M-$1.5B) tend to utilize brokers more than any other of their produce buying counterparts. Currently, 22.9 percent of their produce is procured via brokers; 41.7 percent from produce wholesalers; 25.8 percent direct from grower/shippers; and 9.6 percent from general-line grocery wholesalers (Figure 3.14). Compared to five years ago, direct purchases from shippers are growing while purchases from produce wholesalers and brokers have declined. By 2004 almost an equal amount of produce will be purchased directly from grower/shippers (34.2%) and

FIGURE 3.14

Sources of Produce for Mid-Size Retailers, by Year

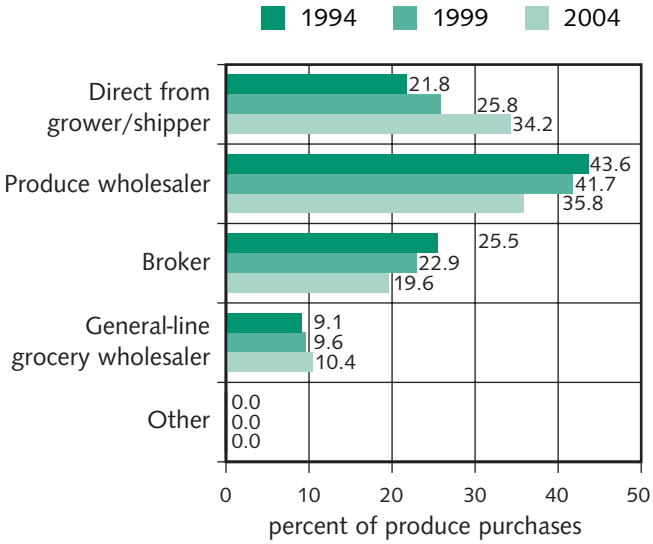
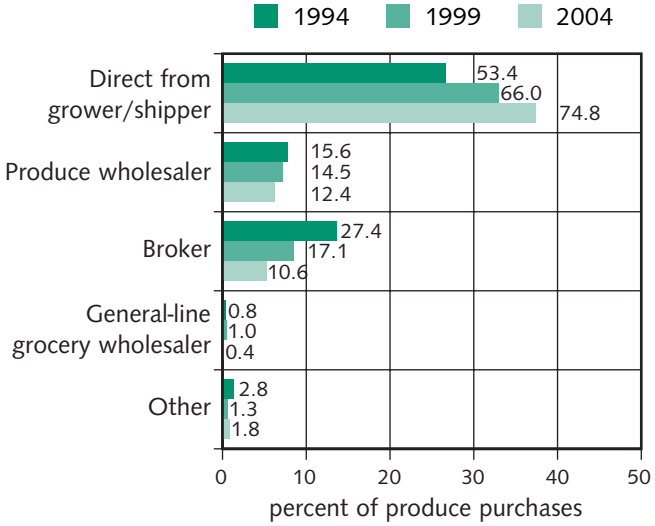


FIGURE 3.15

Sources of Produce for Large Retailers, by Year



from produce wholesalers (35.8%). Purchases from general-line grocery wholesalers will remain constant (10.4%) while brokers will experience a loss of business declining from 22.9 percent of purchases today to 19.6 percent in five years.

Turning toward the purchasing practices of large firm buyers, one thing is eminently clear—these buyers have and will continue to show a strong preference for buying direct from grower/shippers. While 53.4 percent of their purchases were procured from grower/shippers in 1994, this number increased to 66.0 percent today and is predicted to climb to 74.8 percent in just five years (Figure 3.15). All other sources of produce currently play a very minor role, as only 14.5 percent is purchased from produce wholesalers and 17.1 percent via brokers. Each of these is expected to decrease in importance in the future.

Global Procurement May Be Next at Ahold

Royal Dutch Ahold is one of the world's largest and most innovative retailers. It operates over 3,600 supermarkets in more than twenty countries, employs over 220,000 people, and had 1998 sales of approximately $35 billion dollars. In the United States, Ahold owns BI-LO, Stop & Shop, Tops Markets, Giant Foods (Carlisle, PA), Giant Foods (Landover, MD), and (pending FTC approval) Pathmark.

In the U.S., Ahold's produce challenge is to keep its 2,000 stores fully stocked with fresh fruits and vegetables. Yet despite the physical proximity of its stores—all on the East Coast—at least to date Ahold has not developed one common procurement program for all its U.S. companies. If one of the common supplier anxieties regarding retail consolidation is "where there were two buyers before, now there is only one," this conventional wisdom does not seem to be borne out by Ahold's example. Produce buying and merchandising are still under

continued ☛

the control of the produce personnel in the offices of each of the respective operating divisions.

However, that does not mean that serious efforts are not being made at Ahold to ensure coordination across companies. In produce, for example, a so-called "synergy group," comprised of the produce directors from each company meets 2 to 4 times a year. It also has monthly conference calls to identify areas of potential collaboration, to share recent successes and failures, and to decide what commodities might be sourced in common. In addition, prices asked and prices paid to suppliers are shared electronically among the Ahold member companies on a weekly and sometimes daily basis.

Ahold has engaged in some initial experimenting with "global sourcing" of produce. Holland vine tomatoes and Kiwi fruit are examples. In these cases, giving one, or a few shipper(s), the opportunity to offer one price in order to supply 2,000 stores can be a powerful incentive to ensure suppliers' attention to quality standards and to arrive at the lowest delivered cost at the same time.

Yet such coordinated programs are not easily put together, Ahold has reported. Because participation from all five U.S. firms in each of these early "common sourcing" programs has been voluntary, an individual produce buyer can opt not to participate, thereby diluting the potential effectiveness of the program for the others as well as for the supplier(s). Nevertheless, Ahold is encouraged by these early results and has publicly stated that it intends to move in this direction slowly but deliberately. ◆

Concentration of Produce Purchasing

Produce executives were asked to estimate the percentage of their produce purchases that are procured from their top ten suppliers. Currently, for all firms, 69.3 percent of their produce originates from ten suppliers, up from the 62.6 percent they report for 1994 (Figure 3.16). This number is expected to increase slightly through 2004 to 70.1 percent for firms, on average.

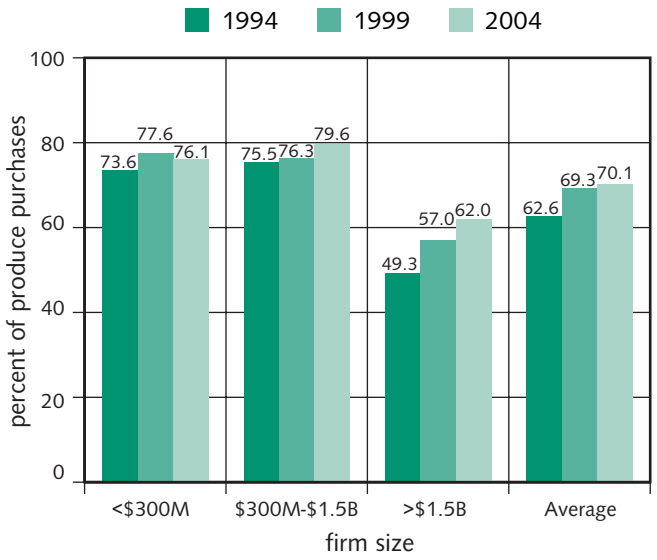
Medium and large firm buyers predict the percentage from top ten suppliers will increase heading toward 2004. Only small firm buyers expect a decrease in the percentage of their purchases procured from their top ten suppliers. Small firm buyers report that five years ago they utilized their top ten suppliers for 73.6 percent of their purchases (Figure 3.16). Today, that figure has increased to 77.6 percent. However, these buyers predict a very slight decrease to 76.1 in five years.

Produce executives representing mid-size firms expect little change from their current figure of 76.3 percent. Large firm buyers, on the other hand, report a steady increase of purchases from their top ten suppliers, increasing from 49.3 percent in 1994 to 57.0 percent today and rising to 62.0 percent by 2004 (Figure 3.16).

Small and mid-size firms typically procure a larger percentage of their produce through brokers and/or wholesalers, therefore utilizing far fewer total suppliers than large firms. It is not surprising that these firms procure a higher percentage of their produce from their top ten suppliers.

FIGURE 3.16

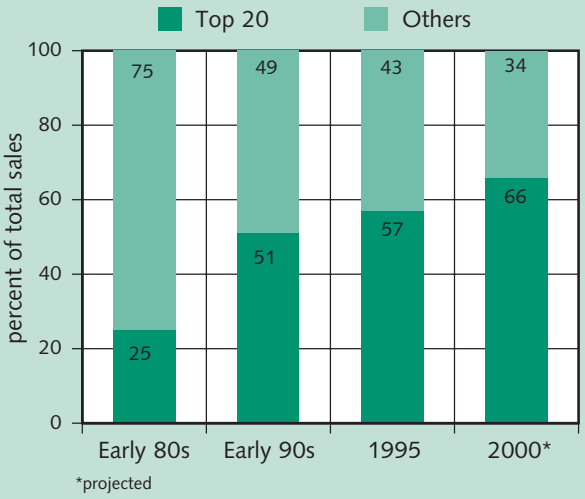
Importance of Retailers' Top 10 Suppliers, by Firm Size and Year



Fewer Retailers Means Bigger Accounts

A more concentrated food retailing industry does not mean less overall business. Indeed, the U.S. population continues to grow at almost 1 percent a year so there continue to be more mouths to feed. The figure below, based on data supplied by Kraft Foods, illustrates, however, what happens to the typical food supplier in the face of consolidating retailers. Whereas only about 25 percent of Kraft's sales were accounted for by their largest 20 accounts in the early 1980s, that number increased to over 50 percent a decade later. And, by the year 2000, most grocery suppliers report that their top 20 customers will account for about two-thirds of all their sales. So fewer retail accounts exist, to be sure, but each one of them is more important than ever before as they account for more volume. For the supplier who continues to be a valued supplier, the change to a larger retailer only means more sales, perhaps made still more attractive by the lower transaction costs typically accompanying large accounts. The greatest difficulties, however, arise for suppliers who lose the account entirely to a competitor. In the past, that supplier simply developed other customers. Today there are far fewer alternatives when a major account is lost. ◆

Percent of Total Sales Accounted for by Top 20 Accounts



Source: Willard Bishop Consulting

Buying Office Mergers

What happens to retail produce buying offices when a merger takes place? Of course, it depends. Recent retailer consolidations, between 1996 and early 1999, have been grouped into 3 different scenarios depending on the type of strategy used to reorganize the buying offices of the acquired and acquirer. (see below)

Case I:

In some cases two small companies (annual sales under $300 million) may merge in attempts to take advantage of increased buying power and operating efficiencies. These mergers are not happening in large numbers. In this case it is unclear whether the number of produce buying offices changes. The individual companies may have been buying produce before the merger from a general-line, grocery wholesaler and/or produce wholesalers. If the merger forms a new company large enough, a new produce distribution center and buying office may be established with some procurement direct from shippers, thus benefiting shippers but to the detriment of the original wholesalers. And indeed, many small companies with

continued ☛

sales under $300 million, even when merged with another small company, may still not have the volume or expertise to establish a stand-alone produce-buying program.

- Fresh Fields and Whole Foods–1996
- Byerly's and Lunds–1997
- Red Apple and Sloans–1997

Case II:

A more frequent scenario is when large chains (annual sales over $1.5 billion) or mid-size chains (annual sales between $300 million and $1.5 billion) purchase small firms to expand or complement their current market areas. Before the acquisition, the small, acquired companies most likely purchased most of their produce from general-line grocery wholesalers and/or produce wholesalers.

With the acquisition, the small, acquired companies are generally folded into the larger companies. The larger chain normally takes over the produce purchases for all stores assuming they have more buying power and will be able to procure produce cheaper due to the added volume. In this scenario, the suppliers originally doing business with the larger of the chains—the acquiring chain—are likely to take on the added volume and increase their business. As in Case I above, the original wholesalers of the acquired company may well lose the produce business.

- ABCO and Fleming–1996
- Bay Area Foods and Certified Grocers–1996
- Food Fair and Food Lion–1996
- Keith Uddenberg and Quality Food Center–1996
- Klarides and The Stop & Shop Company–1996
- Smitty's and Smith's Food and Drug–1996
- Bread of Life and Whole Foods–1997
- Farm Fresh and Richfoods–1997
- Randall's and SuperValu–1998
- Seessel Holdings and Albertson's–1998

Case III:

Mergers or acquisitions of mid-size and large firms with complete produce buying offices and direct purchasing programs with other firms having comparable buying offices have been occurring at a rapid pace. Here, two alternate strategies are possible: retain two separate buying offices or combine them at one of the companies' headquarters.

The optimal strategies for combining such companies are not always clear. Would merging buying offices into one office reduce costs through volume buying? Could one buying office efficiently track and control product movement through perhaps thousands of stores and a dozen distribution centers? Would shorts and longs be managed more or less effectively through one, centralized buying office? Could buyers and category managers partner with preferred suppliers to implement new logistics and new initiatives to expand produce consumption?

It appears that the primary strategy of the mergers and acquisitions in this case has been to combine buying offices. Approximately half of the largest mergers amongst the top 20 firms have chosen to maintain autonomous buying offices.

- Hughes and Quality Food Center–1996
- Kash 'N' Karry and Food Lionv1996
- The Stop & Shop Company and Ahold–1996
- Vons and Safeway–1996
- Delchamps and Jitney Jungle–1997
- Food 4 Less (Ralph's) and Fred Meyer–1997
- Quality Food Center and Fred Meyer–1997
- Ralph's and Fred Meyer–1997
- Riser and Giant Eagle–1997
- Smith's Food and Drug and Quality Food Center–1997
- American Stores and Albertson's–1998
- Buttrey and Albertson's–1998
- Carr Gottstein Foods and Safeway–1998
- Dominick's Finer Foods and Safeway–1998
- Giant Food and Ahold–1998
- Fred Meyer and Kroger–1999 ◆

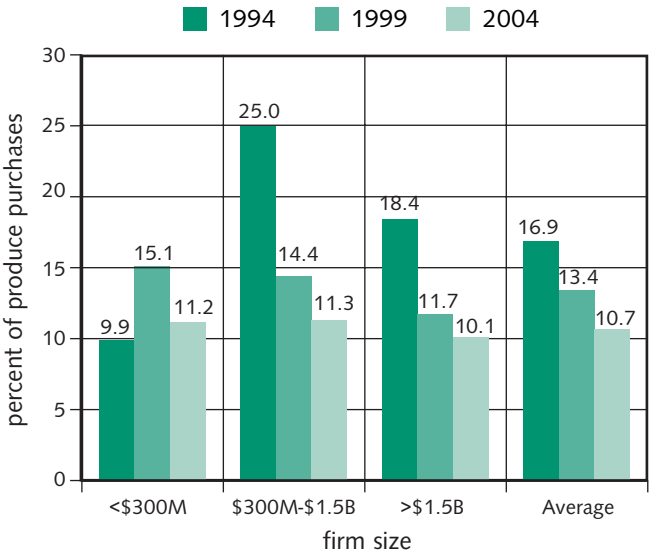
Opportunity Buying

Occasionally, produce buyers have the opportunity to procure produce on the "spot" market. This may become necessary to balance supply or to take advantage of an attractive price in an oversupply situation. On average, produce executives report procuring 13.4 percent of their produce in this manner, a decline from 1994, when 16.9 percent of produce was procured on the "spot" market (Figure 3.17). This decline is expected to continue with a predicted deterioration to 10.7 percent in 2004.

This predicted decrease in "spot" buying between 1999 and 2004 is echoed by all three firms sizes, and surprisingly, all three are currently and expect to continue purchasing a remarkably similar percentage of their produce off the spot market (Figure 3.17).

FIGURE 3.17

Percent of Produce Purchased Through "Spot Buying," by Firm Size and Year



It is interesting to compare this finding against the typical job responsibilities of category managers. When asked how category managers spend their time, *FreshTrack 1999* respondents report that category managers spend very little time (4.8 percent from Figure 3.8) determining investment or opportunity buys. This certainly agrees with their gradual loss of interest in this type of procurement strategy as revealed above.

Contracts

The "Standard" Produce Contract

The very word "contract" provides a connotation of inflexibility and severity. However, contracts can be written in numerous ways to reflect the goals of both buyers and sellers. Contracts in the produce industry are usually for a period of a season or a year, with specific price, quantity, and/or quality requirements. It is these "specific" requirements, however, which vary from contract to contract depending on the particular commodity and the needs of the supplier and buyer.

Contract prices are sometimes set at one level and remain fixed over the length of the contract. They may also be set at a fixed level below the current f.o.b. price or even at a price that fluctuates within, say plus or minus 15 percent of the open-market price.

In addition, quantities may be fixed or may be allowed to fluctuate somewhat, usually by about ten percent of an agreed upon forecast. Often clauses are developed to take into account major catastrophes or "acts of God" which would devastate one or the other of the contract parties.

Buyers indicate that contracts with packaged salads, fresh-cut vegetables, and perhaps bananas are most common and easier to manage than with other commodities. These value-added products have fewer inherent risks than a field of broccoli, for example, which can vary significantly in volume, quality, and time of harvest. Moreover, prices and supplies of these value-added items tend to be stable, resulting in a continuous supply of product. They also come from larger firms and from segments of the industry dominated by a few large players.

As relationships become more formal between buyer and seller, contracts, too, become more formal and more specific. Signed contracts are

continued ☛

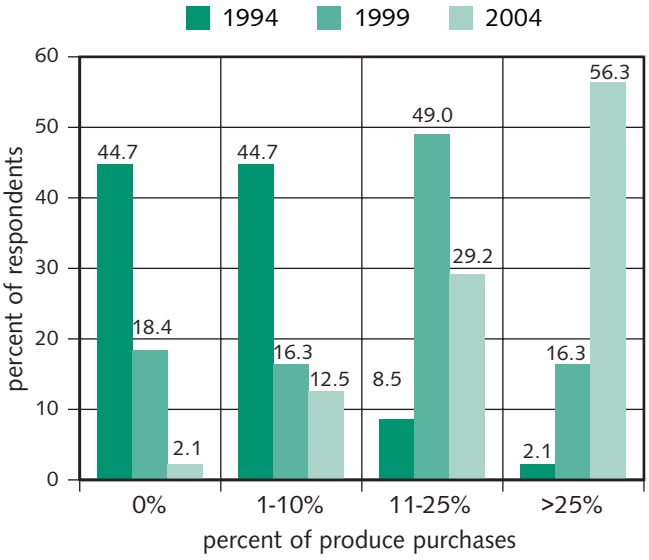
increasing with fewer contracts relying on the traditional produce industry "handshake" or "gentlemen's agreement."

Contracts have increased at the same time buyers and sellers have become larger and more sophisticated. It is likely that such firms can no longer take the risks with open market supply and demand forces that prevailed in the past. Might not risk aversion be a new mode of thinking for the produce industry? ◆

Produce executives were asked to determine the percentage of their produce purchases that are made under some type of contract with suppliers. On average, only 18.4 percent of all retail firms do not engage in any type of contracting (Figure 3.18). This figure has decreased considerably since 1994 when almost 44.7 percent of firms indicate they did not use contracts. However, in just five years, only 2.1 percent of firms believe they will not use contracts as a method of pricing.

FIGURE 3.18

Retailers' Use of Contract Pricing, by Year

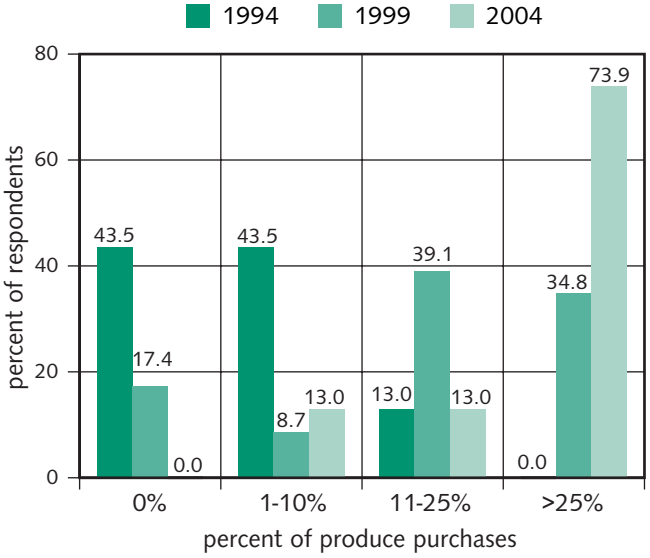


In other words, the majority of firms do use contracts and are using them for greater percentages of their produce purchases. Currently, 16.3 percent of firms use contracts for at least 10 percent of their purchases while 49 percent of firms have between 11 and 25 percent of their produce under contract (Figure 3.18). Finally, 16.3 percent of firms are currently contracting for over 25 percent of their produce purchases.

Contract pricing is much more prevalent in large firms than in either small or mid-size firms. Only 13.0 percent of large firms report that just five years ago they used to contract for 11 percent or more of their

FIGURE 3.19

Use of Contract Pricing by Large Retailers, by Year



produce (Figure 3.19). Today that figure has swelled to 73.9 percent (39.1 plus 34.8%) and is expected to grow even more to an incredible 86.9 percent of firms contracting for at least 11 percent of their produce by 2004. In contrast, only 38.5 percent of small firms currently contract for a similar amount of produce. They, too, however, expect to dramatically increase their use of contracts as 75.0 percent (58.3 plus 16.7%) of all small firms responding to this survey predict they will contract for at least 11 percent of their produce in just five short years (Figure 3.20).

Seventy-five percent of produce executives from mid-size firms currently contract for at least 11 percent of their produce needs (Figure 3.21). Furthermore, by 2004, 91.6 percent of mid-size firms (33.3 plus 58.3%) will contract for at least 11 percent of their produce purchases.

FIGURE 3.20

Use of Contract Pricing by Small Retailers, by Year

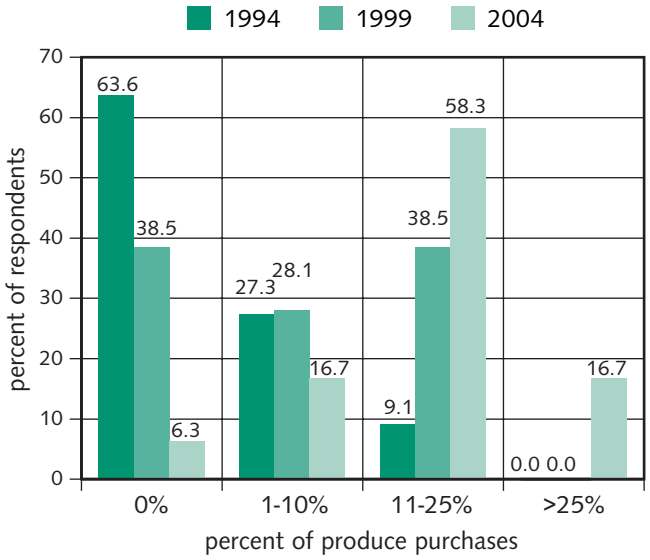
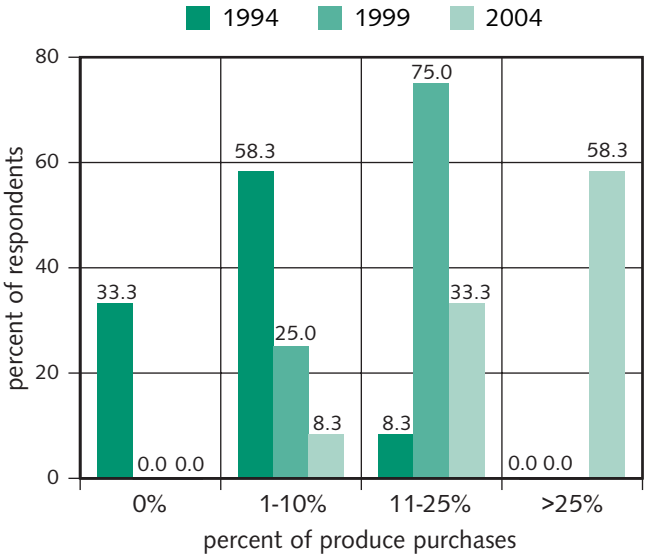


FIGURE 3.21

Use of Contract Pricing By Mid-Size Retailers, by Year



The Fresh Produce Coordination Challenge

The two most common words in the produce industry are "supply" and "demand." Somehow these two economic forces interact to convey signals to channel players to either provide or hold back just the optimal amount of products in order to satisfy marketplace needs. The principal signal that conveys this prodigious amount of information is price. However, due to inherent product perishability and the long-run nature of the investment in much fresh produce production, additional supporting mechanisms are needed.

Especially in the long term, coordination and adjustment challenges exist for perennial crops which include many fresh produce items. These challenges result from: (1) the long-run nature of orchard investments, (2) the biological time lag between plantings and actual production, (3) the confusion associated with prices which reflect both short-run fluctuations and long-run supply-demand balance conditions, (4) the inherent difficulty in predicting both industry structure and overall economic conditions far in the future, and (5) limited information for making critical planting, advertising, and investment decisions. The only logical recourse is to base current decisions primarily on the prices and net returns of past years. The problem, of course, is that the past has shown to be a poor predictor of the future.

The produce industry requires mechanisms to assist to better coordinate long-term adjustments in supply with the inherent and inevitable changes in long-run consumer demand. Some of these mechanisms include: grower cooperatives, grower-distributor joint venture investments, marketing orders and agreements, and short- and long-term contracts. Although all of these coordination mechanisms are in current use in the fresh produce system, the current study shows that produce retailers are particularly interested in contracts. ◆

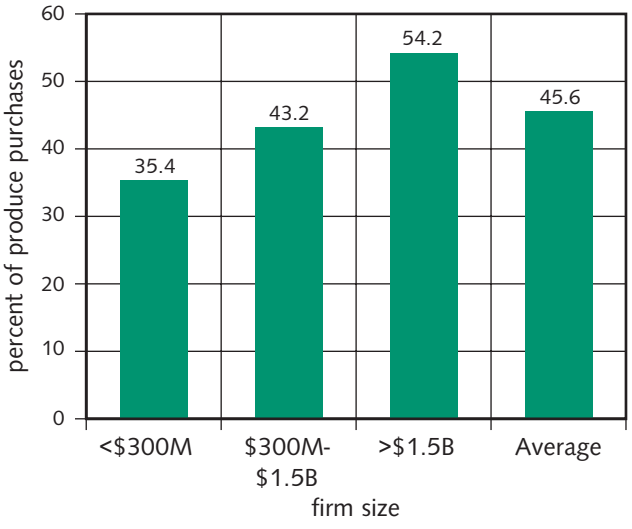
Transportation

Transportation is a critical issue within the produce distribution system. Quick delivery requirements dictated by high product perishability, as well as the long distances often separating production areas from major consumer markets, combine to make transportation a key variable for the successful operation of both shipping and receiving firms. To learn more about transportation arrangements, costs and logistics, produce executives were asked a series of questions regarding the transportation of produce.

In a recent study by McLaughlin, *et al.* (1997) that focused on retail logistics and merchandising, the authors noted that "…a growing number of retailers now prefer to specify who the carrier will be. Many retailers provide suppliers with a list of authorized or preferred carriers for their grocery orders, sometimes with as few as five or six companies listed." *FreshTrack 1999* respondents corroborate these findings for fresh produce. Currently, on average, retailers arrange for transportation for 45.6 percent of their purchases. Retailers with sales less than $300 million do the least—only arranging transportation for 35.4 percent of their purchases, while executives from mid-size firms arrange transportation for 43.2 percent of purchases. Produce executives representing the largest firms arrange for the transport of over half (54.2%) of their purchases (Figure 3.22).

FIGURE 3.22

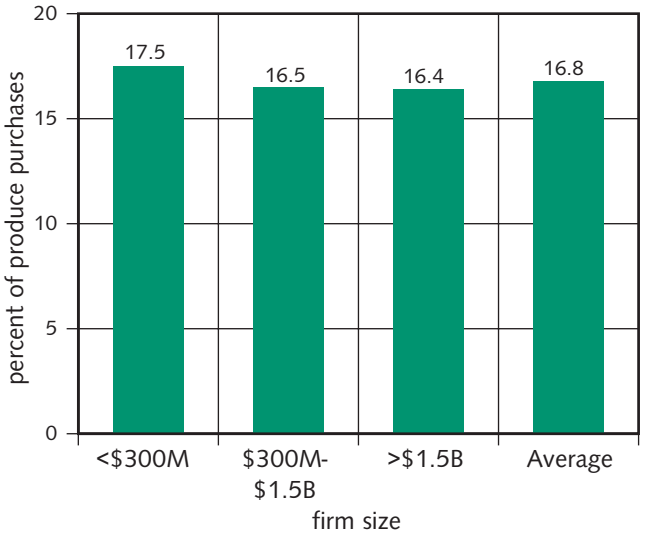
Retailer Arranged Transportation, by Firm Size



Survey respondents were asked to indicate transportation costs as a percentage of produce purchases. For the average firm participating in the study, transportation costs account for 16.8 percent of retail produce sales. Firm size does not appear to influence transportation costs as all three firm sizes respond very similarly (Figure 3.23).

FIGURE 3.23

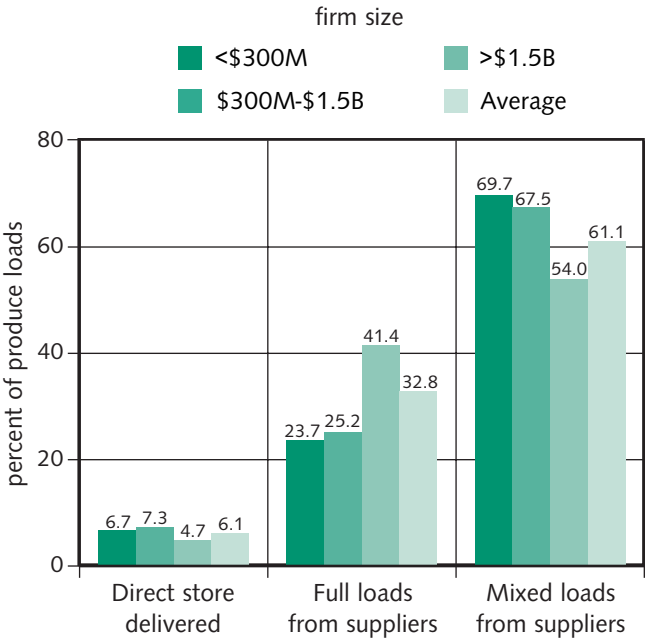
Produce Transportation Costs as a Percent of Total Produce Costs, by Firm Size



Minimizing total transportation costs involves the continuous balance of maximizing truck loads. Since few receivers are large enough to justify "straight-loads" of all commodity shipments, mixed loads (often requiring truck stops at several packing houses) offer efficiencies in transportation and maximum product freshness. *FreshTrack 1999* respondents were asked to describe the nature of produce loads—specifically, what percentage of purchases are 1) delivered directly to stores (DSD), 2) full loads, and 3) mixed loads. On average, 61.1 percent of loads are mixed while 32.8 percent are full truck loads. Only 6.1 percent of loads are delivered directly to the store (Figure 3.24). As might be expected, small and mid-size firms receive the greatest percentage of mixed loads (69.7% and 67.5% respectively) while 54.0 percent of large firms' produce arrives as mixed loads and 41.4 percent as straight loads (Figure 3.24).

FIGURE 3.24

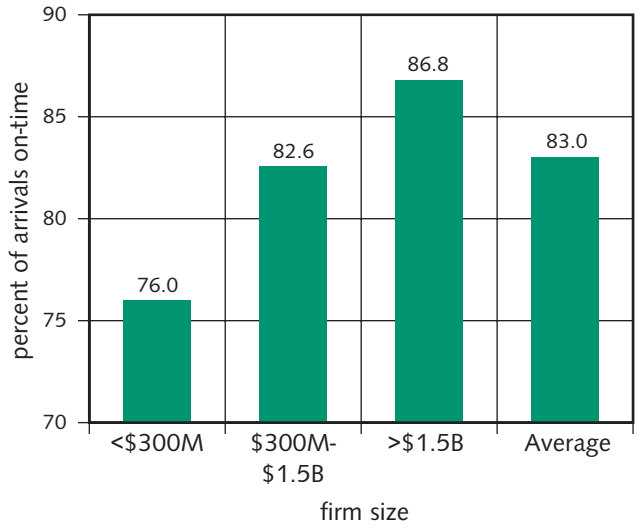
Types of Produce Truck Loads, by Firm Size



On average, 83.0 percent of produce loads arrive at the warehouse or store "on-time." This figure rises slightly to 86. 8 percent for firms with sales in excess of $1.5 billion and drops slightly for mid-size firms (82.6%) and small firms (76.0%) (Figure 3.25).

FIGURE 3.25

On-Time Arrivals of Produce Loads, by Firm Size



Just-In-Time Produce

Just-in-time delivery techniques have, in recent years, been the rage in many industries, including the grocery industry. Today, retailers have raised the bar. Instead of focusing on the size of their warehouses, for example, they are now working to take unnecessary costs out of the supply chain by decreasing overhead and increasing inventory turns. They are ordering just-in-time, staging orders to store, and shipping them out immediately to meet store-level demands.

The produce industry is justifiably proud in pointing out that they have always had just-in-time delivery. One shipper pointed out the obvious: due to product perishability, "How could we not have had just-in-time?" With some exceptions, shippers report that although just-in-time has resulted in more frequent deliveries and same-day shipments, they have been able to meet the demand. As a matter of fact, one shipper indicated it had actually smoothed out his own inventories. In addition, many report that now they are in communication with some buyers every day. "We used to talk one hour a week with buyers; now it is a one-hour-a-day relationship."

Shippers in the Midwest and East Coast feel just-in-time provides them with a competitive niche advantage. While retailers need to work in advance with the West Coast, they wait to the last minute to place orders with shippers nearby to fill in the shortages when transportation from the West Coast is tight or Western shippers can't put together full loads. ◆

The Monday Wagon Train

For some shippers on the West Coast, the increased emphasis on inventory reduction at the retail level has resulted in Monday bottlenecks. East Coast retailers want significant quantities of product shipped out on Monday to arrive just-in-time for the heaviest shopping days at the end of the week—Friday through Sunday. One shipper reported, for example, "I know our alternative format customers do 65 percent of their produce business on Friday, Saturday, Sunday."

This often creates a bottleneck in the transportation system from the West Coast. Trucks returning to California from weekend deliveries on the East Coast generally arrive on Mondays in barely enough time to get loaded with produce for the weekend shoppers and make the return trip to the East Coast. One shipper explained: "They are really creating a bottleneck for us here. We're just inundated with all this tonnage."

Complicating matters is the fact that more mixed loads are being used. The mixed loads are popular with retailers because they can be cross-docked, helping to create fresher produce, and also can create full loads and reduce freight charges. However, mixed loads generally take longer to load.

One impact of this dilemma is that shippers often have to choose which customers' trucks are loaded on Monday. "You'll load your platinum- or gold-level customers on time every time." The result is to sometimes leave orders from fringe customers for Tuesday or filling the orders from outside sources.

Solutions? Building inventories over the weekend is usually not a possibility due to the fragile nature of many commodities. Moreover, working long days on Sundays is often difficult on field, harvesting, and packing crews who have already worked the other six days of the week. One shipper explained the difficulty of trying to ship out product that may have been inventoried over the weekend, "You are clean coming in Monday morning or you may compromise quality and condition of the product on delivery." Therefore, "We're just trying to come up with new systems." New cultural practices may be an answer. Planting, harvesting, and even ripening need to be adjusted to meet changing marketplace demands. ◆

The Buying Process: Summary and Perspectives

- Today there are more buyers and category managers per firm than ever before. Two possible reasons exist for this. One, more buyers may be necessary to manage the influx of SKUs in the produce department. Also, as retailers go direct and use more suppliers than ever before, more buyers are needed to manage these accounts. Two, retailers themselves are growing in size. Increases in mergers have formed mega companies, and while the number of buyers in the one mega company may be less than the former two companies combined, it still is larger than each one had individually.
- A produce buyer's job still revolves around meetings and conversations with suppliers. Furthermore, a category manager's responsibilities include significant time for negotiating with suppliers and developing alliances. These facts point to a number of possible issues. First, negotiations between more sophisticated buyers and sellers are more complex yet grow in importance as consolidation at both buyers and sellers makes each account more important. Second, most produce buyers are more oriented to the supply side of their business—procurement and logistics—than they are to the demand side and consumers. This is particularly true for buyers from large firms. Third, similarly,

despite a marketing awakening of most retail firms in recent years, retailers as a group still appear more prepared to improve their profit picture by trimming product cost than by enhancing final sale conditions.

- The role of produce wholesalers, although declining modestly, still appears to represent a continued valuable "insurance policy" for retailers.
- Produce buyers from all firms indicate a preference toward purchasing greater quantities of their produce needs directly from grower/shippers.
- Brokers may be at risk. Today all firms, regardless of size, consummate fewer broker-facilitated transactions than ever before. Furthermore, this downward trend is expected to continue.
- Produce executives continue to want to do more of their business with "preferred" suppliers. The percentage of produce purchases procured from a retailer's top ten suppliers is expected to continue to rise.
- Will the "opportunity buy" disappear along with the 20th century? Probably not. However, all indicators—a decreasing percentage of produce procured this way, little category management time devoted to developing opportunity buys, and an increase in contracting—point to a diminished role for opportunity or spot buying in the future.
- Although contracts are in favor with retailers, shippers are taking a more tentative approach. This signals a potential trouble spot for shippers who are not currently prepared with the information and experience necessary to make contracting a win-win situation. Those shippers who have developed a positive track record within the contracting arena will be favored as retailers choose their trading partners.

SECTION 4

Supplier Profile

Retail produce executives were asked several questions regarding their suppliers. In addition to revealing the number of suppliers, retailers commented on: preferred supplier attributes, the presence or absence of formal supplier performance guidelines, the importance of year-round product availability, communications between suppliers and retailers, and, finally, supplier-offered promotions.

Number of Suppliers

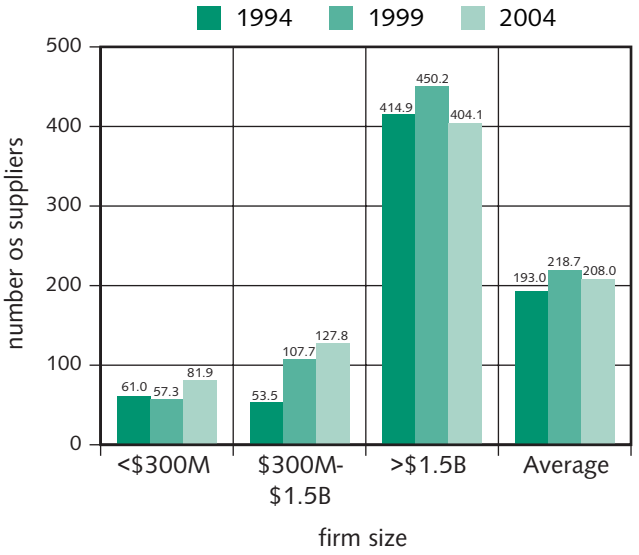
Retail produce executives cast a wide net when it comes to developing their produce supply. On average, 218.7 suppliers are used by *FreshTrack 1999* participants (Figure 4.1). Retailers report that this number has increased slightly from 1994 when, on average, firms used 193.0 suppliers but is expected to fall to 208.0 suppliers by 2004. However, averages are misleading when it comes to suppliers. Small and mid-size firms, by virtue of their wholesaler connections, use far fewer suppliers than their large-firm counterparts.

Buyers from small firms source over half of their produce from wholesalers (42.9% from produce wholesalers and 12.9% from general-line grocery wholesalers), therefore requiring fewer grower/shipper suppliers. However, although they do use far fewer suppliers than large firms, these buyers report doing business with 57.3 suppliers, slightly fewer than five years ago (61.0 suppliers) and increasing slightly to 81.9 suppliers by 2004 (Figure 4.1).

In many ways, mid-size buyers emulate buyers from small firms when it comes to suppliers. Since they, too, purchase over half of their produce supply from wholesalers, they also use fewer suppliers. Produce

FIGURE 4.1

Retail Produce Suppliers, by Firm Size



executives from these firms report that five years ago they utilized 53.5 suppliers. However, today that number has almost doubled to 107.7 suppliers (Figure 4.1). These executives expect to procure items for their produce departments from 127.8 suppliers by 2004.

A much different picture is painted for large firms when it comes to sourcing produce. These produce executives currently rely on 450.2 suppliers, up from 414.9 suppliers in 1994 (Figure 4.1). However, by 2004 they expect to do business with fewer suppliers, dropping to just over 400. It may seem like a daunting task, doing business with so many suppliers; however, recall the discussion on concentration. Currently, these produce executives from large firms purchase 57 percent of their produce needs from just ten suppliers. With average annual produce sales of $923 million dollars this places almost $526 million in sales in the pocketbooks of those ten suppliers. The remaining 440 suppliers must vie for a leftover piece of the pie—some $397 million in produce sales from each of these large firms—a challenge which may prove difficult for smaller grower/shippers or those who cannot provide year-round products or large supplies of products.

Ways to Grow

Two primary methods of growth are available to be used by shippers: growth by adding internal production and sales, or growth through mergers, alliances, or acquisitions. When shippers were asked how they have grown in the last five years, most shippers indicate that they are adding or expanding grower production. The growers could be local in distant production areas with complementary growing seasons. Mergers and alliances were less commonly mentioned.

Several thoughts occur. One, most of the shippers interviewed were not the larger, national, or branded shippers. Two, mergers may cut to the heart of these shippers, many of whom are independent operators or are in partnership arrangements. These shippers, still entrepreneurs, may find it hard to be objective about sharing their business with other stakeholders. A hypothesis is that smaller and medium size shippers are not planning growth through mergers or acquisitions, but are relying on expansion by increasing the number of producers represented or by encouraging increased production of existing producers.

If this is so, smaller and medium shippers may be left out of buyers' offices as mergers and alliances continue with top-tier shippers. Mergers and alliances among these large shippers will form suppliers with resources beyond the grasp of smaller firms, while growth of smaller firms through increases in grower numbers and productivity is likely to be more limited. ◆

Produce Supplier Consolidation Continues Apace

"We were all doing fine selling fruit, but with all of the consolidation at the retail end, we wanted to better serve our customers, and this allows for a more consistent supply."—

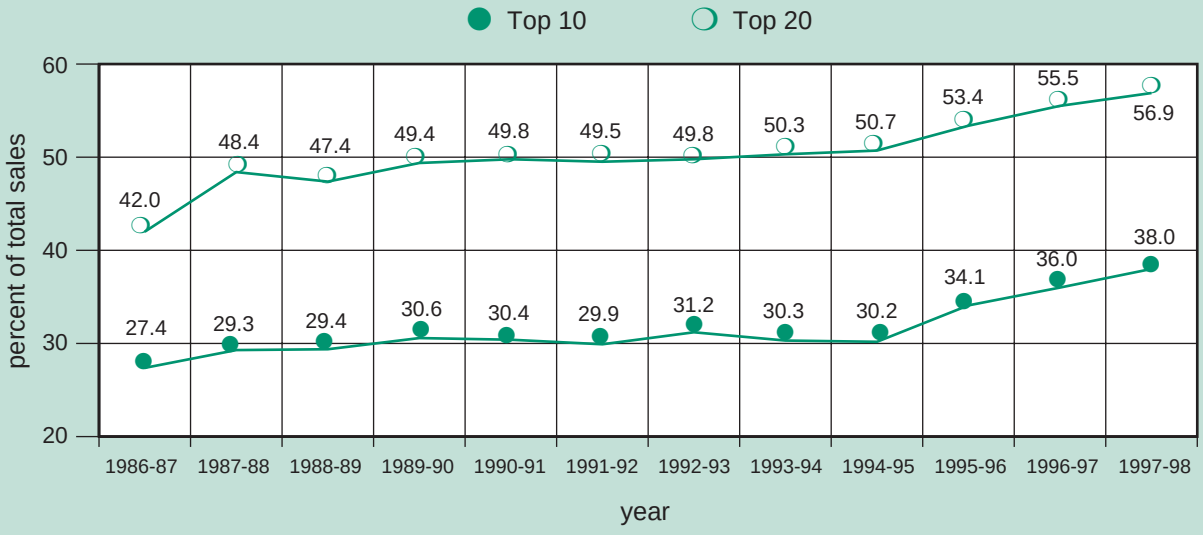
Peter Verbrugge, general manager of Valley Fruit, discussing the recent merger of his company with Columbia Reach Pack and Olympic Fruit Sales.

Though there has been much discussion in recent years of consolidation in the retail food sector, it should be noted that considerable consolidation is occurring at the grower/shipper level as well. Consolidation on the retail end is putting greater pressure on suppliers, and they are often responding by consolidating in their own rights. Such consolidation may allow them to cut production costs and better serve the larger volume requirement of large customers.

This can be seen in data provided by the Washington Apple Commission (see figure below). Since 1986, the production of the top ten firms has doubled, and their share of the overall Washington fresh apple market has increased from 27.4 percent to 38.0 percent. The recent mergers within the Washington apple industry appear to represent a trend. As stated by Jim Thomas, communications director for the Washington Apple Commission, "With the consolidation in retail, we're seeing consolidation from the supply side, which should continue until the supply side catches up." Similar to the retail side, the rate of consolidation has accelerated in the last four years at the grower/shipper level. In other words, 43 percent of the total growth in market share for a twelve-year period occurred in just the last four years. Furthermore, 74 percent of the market share growth for the top ten apple growers occurred in the last four years.

Similar acquisition and merger activity appears to be taking place in other crops, as noted in this recent *Packer* quote of Frank Dunnahoe, President and CEO of the Dundee Citrus Growers Association, "It (consolidation) is going to be a trend. It's not attractive for a large chain store to go to a small packinghouse. Consolidation is a way to survive on this end." ◆

Sales of Top 10 and Top 20 Washington State Apple Shippers as a Percent of Total Washington State Apple Sales



Source: Washington Apple Commission

Food Industry Consolidation Not an Isolated Case: Auto Industry Is More Intense

"Consolidation among [automobile] manufacturers still has some way to go, as those at the top end of the market increasingly question the viability of operating at less than 2.5 million units per year in the current marketplace."—

John Nyholt, automotive leader for financial advisory services at PricewaterhouseCoopers

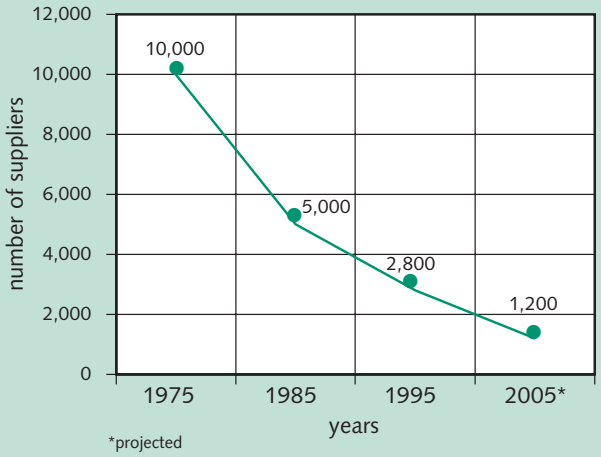
Industry concentration is a fact of life in virtually every industry around the world. To a far greater extent than in the retail food industry, the trend toward consolidation of ownership in the automobile manufacturing industry is gaining momentum. The $40.5 billion merger of Chrysler and Daimler-Benz and the $6.5 billion pending acquisition of Volvo by Ford are seen as the first wave in another new series of mergers that may soon result in only six to eight global manufacturers.

Overcapacity, the pressure to increase economic profit, and the drive by the automobile manufacturers to respond to consumers, who are enjoying a shift in the balance of power towards them, are contributing to the rapid structural change in the industry. Consolidation at the manufacturer level is having important repercussions throughout the automobile supply industry.

"One of the largest challenges we face today is the industry's transition from a component-oriented, build-to-print environment to an integrated supply environment. The days of a part have given away to a requirement to provide an entire module, or a combination of a multitude of parts."—

James W. Wyanlek, Vice President and General Manager of Visteon Exterior Systems Division

Suppliers to the United States Automobile Industry



Source: *Inc. 500*, 1996

Although Daimler-Benz AG's acquisition of Chrysler Corporation in 1998 grabbed all of the headlines, it was just one of hundreds of mergers and acquisitions that have taken place in the automobile industry. Suppliers to the major auto manufacturers are known within the industry by their tier level. In the tiered approach, the auto assembler deals primarily with the top tier suppliers, while lower-tier suppliers are managed by those above them in the pyramid. The Tier 1 suppliers supply entire assembled systems such as engines and dashboards straight to the manufacturers' assembly lines. Tier 1 suppliers get their subsystems and components from lower-level Tier 2 suppliers.

PricewaterhouseCoopers, in their report *Global Automotive Deal Survey*, predicts that consolidation among parts manufacturers will continue into the foreseeable future. The number of key decision-makers for purchasing at auto manufacturers is falling as the number of independent vehicle manufacturers shrinks. Fewer decision-makers means fewer core suppliers. The 1,500 Tier 1 suppliers in 1998 will shrink to about 150 large system integrators and 450 direct suppliers in the foreseeable future. The rest of the field will become Tier 2 suppliers or get out of the auto business altogether.

continued ☛

During the last year, merger and acquisition activity levels were high in the automobile component sector, recording almost double the number of deals compared with 1997—or 316 deals compared with 161. The value of those deals almost tripled over the same period to $30.1 billion with a four-fold increase in the average disclosed deal size. This shift illustrates the scale of supplier consolidation and the increasing drive to achieve critical mass on a global scale.

"Tier 1 suppliers are becoming the quarterbacks of the supply chain as they have to manage Tier 2 supplier relationships even more than before. Logistics capabilities will be critical to becoming a successful Tier 1 supplier in the next millennium."—

Mike Burwell, head of automotive transaction services at PricewaterhouseCoopers

The automobile manufacturers no longer have the resources to handle the complete development and testing needs for their growing vehicle ranges. They are looking for component system partners to develop and test larger and more complex systems so that they may concentrate on product design and marketing. They have pushed back to their suppliers the responsibility for ever more and ever larger systems that can be bolted onto the chassis on the assembly line.

The manufacturers have off-loaded risk, design, and testing and demanded that suppliers lead the development of improved supply chain performance in the lower tiers. To encourage suppliers to deliver these services, the vehicle manufacturers are developing closer long-term relationships with their system and module suppliers. Under the Renault Partnership Approach for example, Renault will automatically select its qualified Optima suppliers for successor models, as long as its suppliers maintain world-class competitiveness.

The suppliers benefit from the opportunity of extra volume from the merged companies and the promise of long-term security in key contracts, but the requirements for product development and testing, international reach, and system and module competence are increasing.

The ability to find synergies, eliminate duplication, and provide additional benefits to the manufacturers requires a broad range of products and an expertise in logistics.

These issues are being addressed, in part, by joint ventures and, in part, by acquisitions. Smaller players have looked for new partners to acquire the breadth of know-how needed to provide the manufacturers with the necessary modules and systems.

As Tier 1 suppliers assume an increasingly important role in sourcing decisions, Tier 2 companies are having to shift their marketing resources to support them. Tier 1 suppliers have begun looking for strong partners to help them in module and systems development, and are offering agreements to the Tier 2 suppliers similar to those currently being offered to them by the manufacturers in return for commitments and development resources. ◆

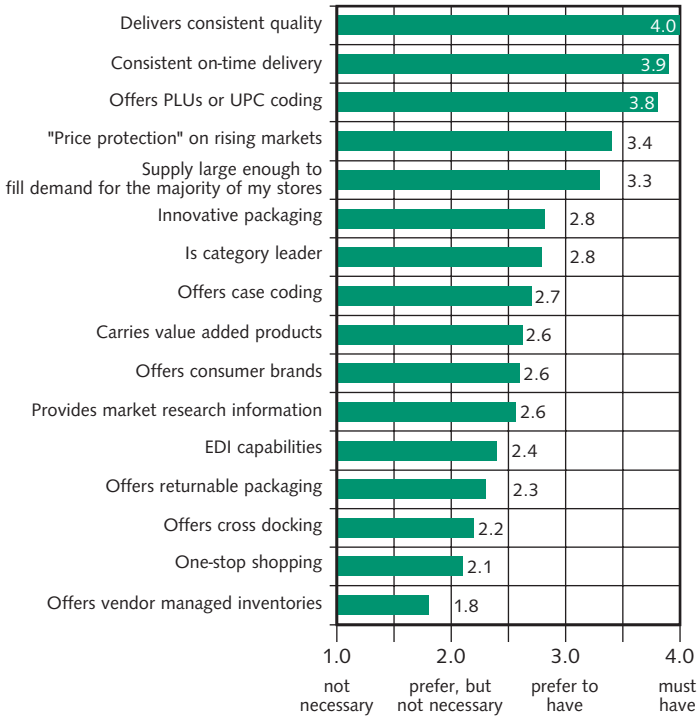
Preferred Supplier Attributes

Produce executives were asked to answer the following question regarding preferred supplier attributes: "Which of the following supplier attributes are most important when considering the formation of a long-term relationship with a produce-sourcing organization?" Retailers were further asked whether, in their opinion, each attribute was a "must have" attribute or conversely "not necessary" at all. "Delivers consistent quality" was the only "must have," scoring a 4 out of 4 (Figure 4.2). However, following close behind are "consistent on-time delivery," and "offers PLU or UPC coding." Other attributes that retail produce

buyers "prefer to have" include "price protection on rising markets," and "large enough supply to fill demand for majority of stores."

FIGURE 4.2

Highly Regarded Supplier Attributes



Delivery on Demand

"We feel we know our products better than anyone else, and we want to guarantee that they will get to the shopper in the best possible condition." This is a sentiment often expressed by shippers. But to what extent will shippers actually go to deliver on this philosophy?

To provide customers with specific stages of ripening and optimal service, one shipper is opening distribution centers closer to major markets. As retailers' ripening rooms age and become obsolete, this shipper is stepping in with updated distribution facilities thus taking over the capital investments, personnel requirements, logistics, and expertise needed to ensure the freshness and consistent availability of his products.

Similarly, another shipper is also taking up this concept of delivery on demand. By opening his own distribution centers closer to the major markets, this shipper is working to guarantee same-day distribution to stores. At the same time, inventorying products closer to the market helps relieve market price fluctuations and inventory uncertainty. ◆

continued

Why PLUs in the First Place?

Why do retailers urge suppliers to put PLU labels on produce items? Why do they rate the importance of suppliers providing PLU or UPC coding as 3.8 on a scale of 1 to 4, where 4 equals "must have"?

Category management, Electronic Data Interchange, and Vendor Managed Inventory all rely on accurate item data which must be standardized across the industry. Yet the largest stumbling block to implementing these important retail initiatives in the produce industry has been the lack of uniform data. While product code guidelines are being researched, they still have a long way to go to carry all the necessary data needed to create information which will accurately and completely track produce item sales. In addition, the data stored on suppliers' computer systems has not, in most cases, been compatible with those on retailers' systems, and visa versa.

The Rest of the Story...

Suppliers state that one of the most frequently requested "services" from retail customers has been PLU identification on products. But their requests only result in increased costs for the shipper. "I think that the biggest thing we have seen in the way of expectations from our customers has been the PLU numbers. The Sinclair labeling systems (machinery) are very costly and don't really make a return on investment other than allow you to stay in business."

continued

Many suppliers, however, recognize the potential benefits to UPC coding. They are interested in how PLUs may be used to gather product movement information and the possibilities of seeing the information used at the retail level. Yet some shippers remain skeptical that PLU tracking is actually being used by many retailers. In the words of one apple shipper, "The original basis, I think, for identifying each variety was that we will be able to promote this variety as premium and this variety as a special, and we don't see as much of that happening as what we would like to see."

Retailers who are using PLUs are quite interested in their results. "We've had experience with apples being labeled. We used to think as retailers that we had to sell Empires, Bartons, Macs—all at 69 cents a pound because the cashier couldn't tell the difference. Now we are seeing where if we want to move Macs or we want to move Empires, we can go put that one on special, and we can get it rung properly. At the end of the deal, we can see where the Macs sales are declining and the Empires or Bartons are picking up. I think as a retailer that information is good to use. We can manage better with that." ◆

As an example of the types of services which are involved, one shipper noted, "I see a number of companies that are now following their produce through to the end consumer. They are looking at the retail selling environment. They are trying to understand that retailer's goals and objectives, and they are trying to backfill that to the retailer in terms of—'We understand your competitive strategy; we understand your stores; we understand your consumers. I've been in your stores; I understand your customers. I know the product you need and I have it.'"

As another shipper noted, "The easier we make it on them, the more business, hopefully, we get."

Shippers predict that tactics such as managing categories with retailers, education and training, food safety, etc. will all fall under the realm of providing services and that, when it makes sense, additional marketing functions will be shifted away from the retailer back to the shipper. However, the costs of hiring and maintaining teams to provide such services as merchandising and management are high and one shipper notes, "The challenge is that added services need to be perceived as valuable." ◆

Servicing Retailers

U.S. growers are among the best in the world. They raise wonderful, shiny apples and plump, red tomatoes all of exceedingly high quality compared with 30 years ago. Has increasing the level of quality in fresh fruits and vegetables affected buying and selling strategies? Some shippers claim that, to buyers, quality is now a given. "It puts you into play."

Because everyone playing the field is using quality and price as competitive tactics, now some shippers are employing a third tactic called service. These added services are being used to differentiate innovative shippers from the rest of the commodity sellers, and they move well beyond discount pricing for ads or sticking PLUs on produce. "We try to out-service our competition."

continued

It is interesting to compare the order in which executives from the three firm sizes placed each attribute. Table 4.1 illustrates these attributes from "must have" in importance to "not necessary" according to the size of the retail respondent.

Typically, supplier services and initiatives which facilitate distribution efficiencies (cross docking, returnable packaging) along with initiatives associated with EDI (including vendor managed inventory) are deemed the least important by produce executives. As always, quality and price rise to the top along with those initiatives that contribute to quality (on-time delivery) and price (price coding) when retailers consider the plethora of supplier attributes necessary for long-term relationships. However, in the end, it appears that the more "services" a grower/shipper provides a retailer, the greater the likelihood that long-term partnerships will be forged.

TABLE 4.1

Preferred Supplier Attributes, by Firm Size

Firm Size		
Less than $300M	**Between $300M and $1.5B**	**Greater than $1.5B**
Delivers consistent quality	Delivers consistent quality	Delivers consistent quality
Consistent on-time delivery	Offers PLUs or UPC coding	Consistent on-time delivery
Price protection on rising markets	Consistent on-time delivery	Offers PLUs or UPC coding
Offers PLUs or UPC coding	Price protection on rising markets	Price protection on rising markets
Large supply to fill majority of stores	Large supply to fill majority of stores	Large supply to fill majority of stores
Carries value-added products	Carries value-added products	Innovative packaging
Is a category leader	Innovative packaging	Offers case coding
Offers consumer brands	Is a category leader	Is a category leader
Innovative packaging	Offers case coding	Provides market research info
Offers case coding	Offers consumer brands	Offers returnable packaging
Provides market research info	Provides market research info	Offers consumer brands
EDI capabilities	EDI capabilities	EDI capabilities
Offers cross docking	Offers cross docking	One-stop shopping
One-stop shopping	One-stop shopping	Carries value-added products
Offers returnable packaging	Offers returnable packaging	Offers cross docking
Offers vendor managed inventory	Offers vendor managed inventory	Offers vendor managed inventory

Service Teams Invigorate Produce Sales Programs

Many leading shippers have reorganized their businesses in order to meet new and exciting challenges in the produce industry. Abandoning the strong tradition of the maverick "sales jockey," upper-level managers are putting together structured sales programs serviced by teams.

The forces driving the reorganization are multiple. Shippers have stated that today's buyers have higher expectations and are more demanding. Sales people on the frontline receive requests for returnable pallets, a greater number of ads, contract pricing, PLU stickers, and more. In addition, industry initiatives are pushing EDI, VMI, and category management to move produce more efficiently through produce marketing channels. And then there is retail consolidation.

Shippers also report that they are in contact with a growing number of different people within their various customer organizations. Increasingly, shippers work not only with the retail buyer, but the directors of produce, category managers, produce merchandisers, transportation and warehouse directors, and sometimes the IT departments.

To manage these forces, many large sales offices have started to evolve away from being strictly order takers to becoming service providers, supplying data and analyses, merchandising, promotion funding, and a commitment to their customer's business. Taking the lead from Procter & Gamble in the grocery aisle, many of the largest shippers are developing "cross functional" teams. Teams may consist of specialists in sales, information technology, food safety, merchandising, and accounting. No longer is there just one sales person acting as the only contact point between buyer and seller. ◆

Recruiting a Team

It is a challenge for suppliers to connect with the customer at all the different levels required, and the costs of maintaining teams to service accounts are considerable. Personnel proficient in all these relevant areas need to be recruited and hired and, furthermore, suppliers must have the volume, product mix, and number of accounts to justify these teams.

Some suppliers have leaped at hiring opportunities provided by retailers themselves. As retail consolidation has increased, buying offices have been trimmed providing a labor pool of highly trained and qualified produce experts interested in staying in the produce industry. These people often seek rewarding work and often find it on the supply side. The shippers interviewed for this study often had sales personnel with buyer experience.

Suppliers have also found highly qualified people from food manufacturing. These people have lots of sales and servicing experience and know what retailers are looking for. Shippers are eager to hire these people and are more willing to provide them with the specialized training in produce as well as attractive compensation packages. ◆

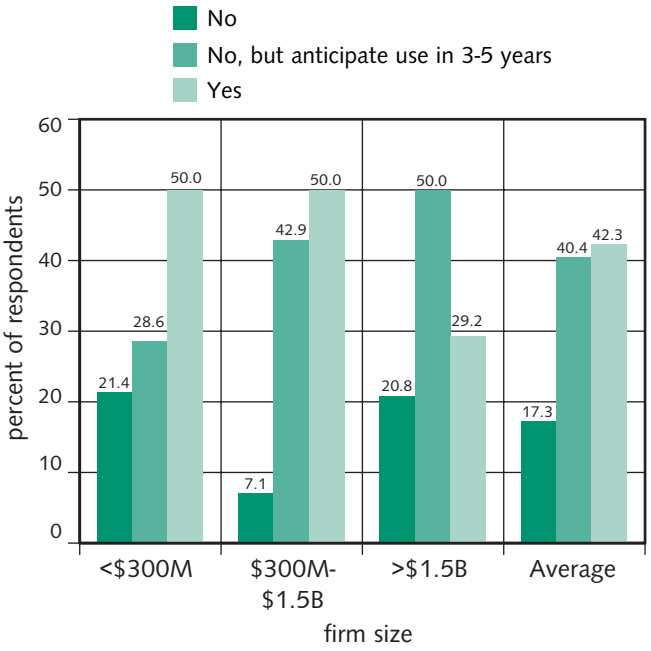
Performance Guidelines

A growing bias within retail buying offices today is the development of formal performance guidelines to "monitor" supplier performance. McLaughlin, *et al.* (1997) described the current status of performance guidelines for the Health and Beauty Care (HBC) industry in the report, *Retail Merchandising and Logistics*. The authors surveyed executives representing both merchandising and distribution on this issue. In 1997, merchandisers were approximately evenly divided between those who did and those who did not have formal vendor policy performance guidelines. One-third reported having such guidelines, 28 percent did not have formal guidelines, and 39 percent planned to have them in 3 to 5 years. In 1997, 41 percent of distributors had them, while an additional 55 percent planned to have them in 3 to 5 years. Only 4 percent did not have performance guidelines.

Produce executives responding to the *FreshTrack 1999* study indicate a greater use of performance guidelines for produce suppliers than was reported in the McLaughlin study for HBC suppliers. On average, 42.3 percent of firms report having formal performance guidelines for their vendors and an additional 40.4 percent expect to have them in place within 3 to 5 years (Figure 4.3). Only 17.3 percent do not have them nor do they expect to have them in the near future. For those companies who do have performance guidelines, they are enforcing them with 77.8 percent of their suppliers.

FIGURE 4.3

Retailer Initiated Supplier Performance Guidelines, by Firm Size

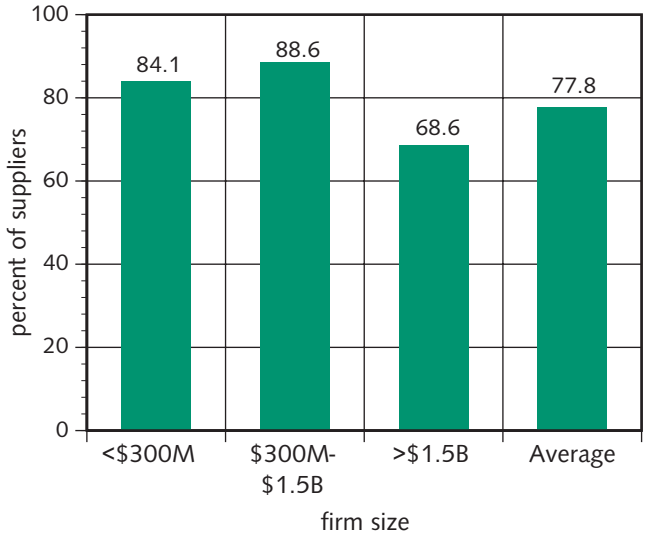


Somewhat surprisingly, produce executives representing large firms report the least use of vendor performance guidelines as only 29.2 percent currently make use of them (Figure 4.3). Furthermore, for

those firms that do have guidelines in place, they are only enforcing them with 68.6 percent of suppliers (Figure 4.4). However, it appears that large firms are playing catch-up in a rather dramatic way. Fifty percent of executives from large firms expect to have these performance guidelines in place in 3 to 5 years bringing the total to 79.2 percent (50.0 plus 29.2%) of large retailers expecting to have performance guidelines by 2004 (see Figure 4.3).

FIGURE 4.4

Enforcement of Supplier Performance Guidelines, by Firm Size



Mid-size firms tend to use vendor performance guidelines the most—half of these firms report having these guidelines currently in place for use with 88.6 percent of their suppliers (Figures 4.3 and 4.4). By 2004 an additional 42.9 percent of respondents will have guidelines in place bringing the total to 92.9 percent of all mid-size firms utilizing vendor guidelines to monitor supplier performance.

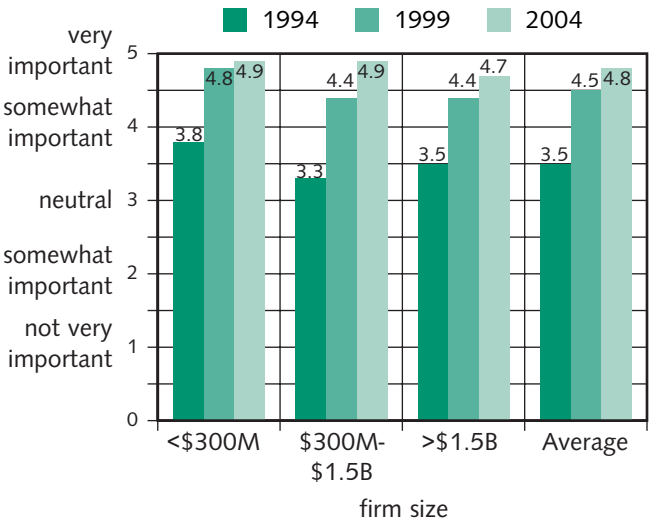
Half of executives representing small supermarket companies report having vendor performance guidelines and an additional 28.6 percent plan to have them in place in 3 to 5 years (Figure 4.3). For those that do have guidelines, they are applying them to 84.1 percent of their suppliers (Figure 4.4).

Year-Round Produce Availability

Today, consumers demand the same quality peach in January as in July. The ability to provide specific produce items 365 days a year is a mandate currently facing retailers. *FreshTrack 1999* respondents were asked to indicate the importance they place on year-round produce availability using a scale of 1 to 5 where 1 equals "very unimportant" and 5 equals "very important." Overall, produce executives assign year-round product availability a ranking of 4.5 indicating a very strong preference (Figure 4.5).

FIGURE 4.5

Importance of Year-Round Product Availability to Retailers, by Firm Size and Year



When these executives evaluate what their demand for year-round supply was 5 years ago, they allocate a score of 3.5. However as they look toward 2004, year-round supply will become an edict—something suppliers will have to address if they hope to successfully compete in the future. There is very little difference between firm sizes as they placed their vote on the importance of year-round supply.

Buyers Provide Impetus to Shipper Growth Strategies

One conclusion is inescapable from the increase in retail concentration: bigger buyers require larger volumes. When shippers were asked how their businesses have grown during the last 5 years, almost all responded that they are increasing product diversity and/or sourcing to have product available 12 months a year. The most frequent reason given? To remain in contact with the buyer at all times throughout the year.

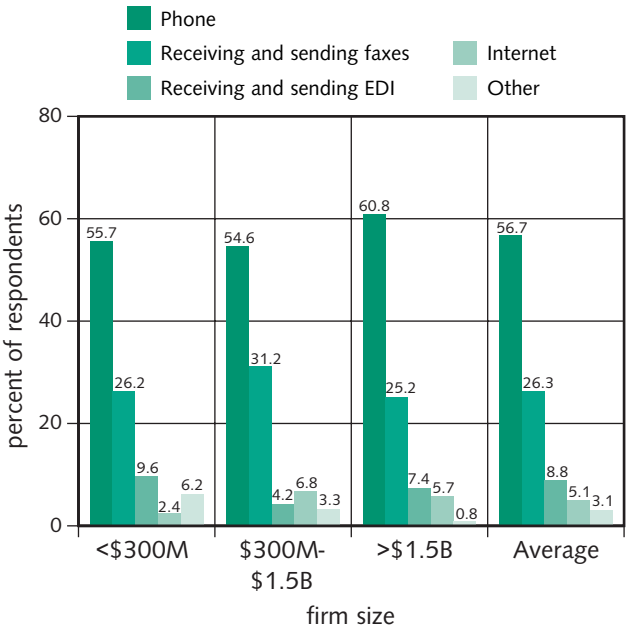
Most suppliers interviewed for this study feel that the down time naturally occurring between seasons allows the buyer-seller relationship to erode so much that there is a risk that the customer will not renew his business during the subsequent season. With year-round product availability, the shipper never has to be out of contact with the customer.

Growth through greater product diversity is also an extremely important strategy. With a more diverse array of products, suppliers can offer more "full-service" or "one-stop shopping" within a category. From one shipper: "As our customers grew we had to grow with them. Our vision is to partner with several product lines so as to have the products to manage the customer's entire category."

From the shippers' point of view, "When we hear one-stop shopping, we are thinking of a product category. So in fruit we are thinking of peaches and plums and nectarines. I think we are starting to extend one-stop shopping to mean "at any time of the year." We feel that it is important to have the right product mix, whatever that is for berries or soft fruit, and also at any given time of the year." ◆

FIGURE 4.6

Methods of Communication, by Firm Size



Communication with Suppliers

Communication in the past was simple and straightforward. Just pick up the phone and proceed. But times have changed. Today retailers have many communication options available to them. *FreshTrack 1999* executives were asked to estimate the percentage of all of their communication with suppliers done in each of the following ways: via phone, receiving/sending EDI, Internet and receiving/sending faxes. Currently, as would be expected, the majority of communication is still done over the phone (56.7%); however, 26.3 percent is enacted via fax (Figure 4.6). EDI and the Internet still play a minor role (8.8% and 5.1% respectively). There is very little difference between firm sizes in their preferred means of communication.

Supplier Offered Consumer Promotions

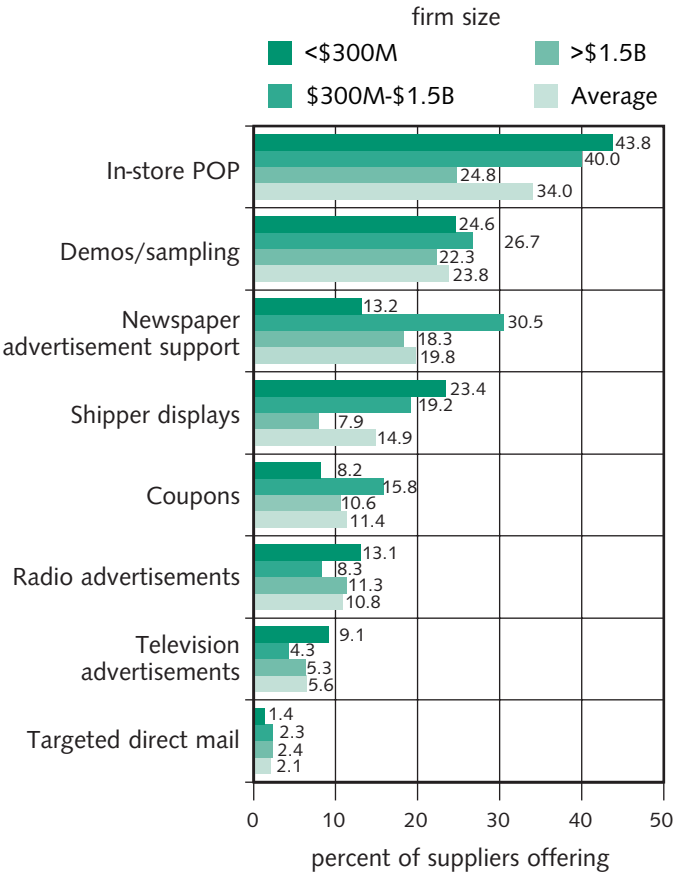
Suppliers have the ability to offer a complex matrix of consumer promotions to retail produce buyers. These include: TV advertising, radio, coupons, newspaper ad support, in-store POP (point of purchase), targeted direct mail, shipper displays, and demos/sampling. The most frequently offered promotion is in-store POP display material as retailers report that 34.0 percent of suppliers offer these merchandising aids

(Figure 4.7). Demos/sampling and newspaper ad support were next followed by shipper displays and coupons. Radio, TV ads, and targeted direct mail are offered the least to retailers by their produce suppliers.

Executives from small and mid-size firms report receiving promotional assistance from a higher percentage of suppliers than executives from large firms. For example, 43.8 percent of suppliers offer small firms in-store POP's, while executives from large firms report that only 24.8 percent of their suppliers make a similar offer (Figure 4.7).

FIGURE 4.7

Supplier Offered Consumer Promotions, by Firm Size



However, caution must be used when interpreting these results. At first glance it may be somewhat surprising to see that a higher percentage of suppliers offer small- and mid-size retail firms promotional assistance. However, recall that small and mid-size retailers frequently use general-line grocery wholesalers and produce wholesalers. These suppliers have historically provided merchandising support for their customers. In addition, large firm buyers currently do business with 450 suppliers. If, for instance, 25 percent of their suppliers provide in-store POP's this calculates to 112 suppliers, more suppliers than either small or mid-size buyers currently deal with in total.

Supplier Offered Trade Promotions

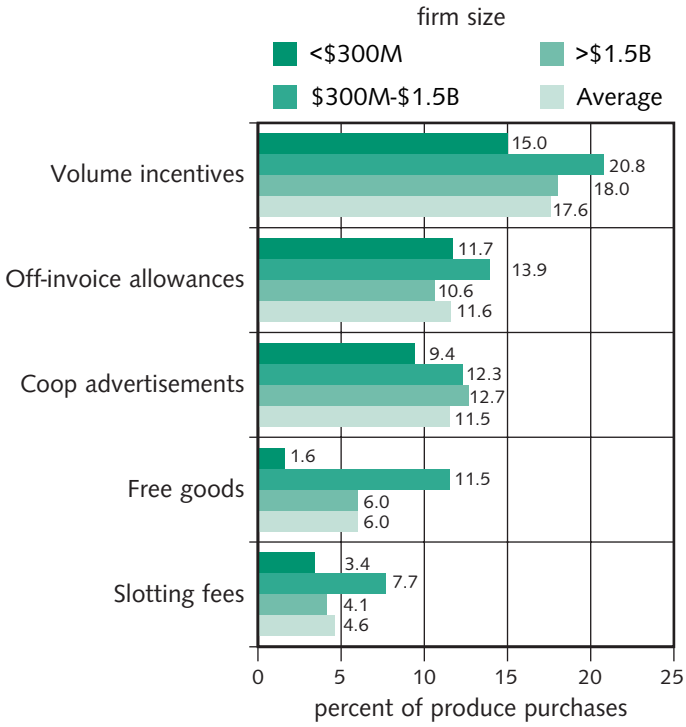
Suppliers offer retailers several types of trade promotions: cooperative advertising, volume incentives, slotting fees, free goods, and off-invoice allowances. When reviewing retailers responses, it is important to note that less than 21 percent of produce purchases are accompanied by any type of trade promotion. This is largely due to the commodity nature of the produce business. But as packaged salads, pre-cuts, and brands grow in importance these figures are quite likely to increase.

The most common type of trade promotions offered is volume incentives. On average, retail produce executives report that 17.6 percent of purchases have volume incentives associated with them (Figure 4.8). Off-invoice allowances and cooperative advertising are also popular (11.6 % and 11.5% of purchases respectively) while slotting fees and free goods are offered less often.

Again, caution is advised when reviewing these numbers since average produce department sales are significantly different among the three firm sizes. Basing conclusions on simple percentages is misleading. For example using slotting fees as an illustration, small firm executives indicate that 3.4 percent of purchases include a slotting fee which indicates that slotting fees accompany $1.3 million of produce purchases. For medium-size firms $9.5 million worth of produce purchases include slotting fees, whereas

FIGURE 4.8

Supplier Offered Trade Promotions, by Firm Size



for large firms this number swells to $37 million. In other words, $37 million worth of produce purchased by large firm buyers comes with a slotting fee attached.

Supplier Profile: Summary and Perspectives

- Retail produce executives continue to expand their cadre of suppliers. However, at the same time they are utilizing their "top ten" suppliers for greater percentages of their produce purchases than ever before.
- One of the five most preferred attributes outlined by produce executives for suppliers is "large enough supply to fill demand for a majority of stores." This is a danger signal to small grower/shippers who may not be able to accommodate this request. Responses to this demand are required.
- Retailers also indicate a strong preference for year-round product supply. This places pressure on shippers to develop a year-round supply if they do not already have one.
- Although formal vendor performance guidelines are becoming standard operating practice among produce buying offices, enforcement appears to be less so.
- Despite the availability of nearly instantaneous and efficient modes of communication (email, EDI, fax), the telephone still dominates within produce buying organizations.
- Supplier-funded promotions are not commonly offered—probably because of the commodity nature of the business.

SECTION 5

Produce Department Technology

Technology has dramatically changed the way the retail food industry operates. Computers and advanced technology have changed the way retailers buy and suppliers sell. It has changed the way produce moves through the distribution system. Technology has even replaced the bricks and mortar of traditional supermarkets in favor of high speed modems and home delivery. *FreshTrack 1999* respondents were asked a series of questions in order to gauge their past, current, and future use of various types of electronic technology—Electronic Data Interchange (EDI), Vendor Managed Inventory (VMI), and Continuous Replenishment Programs (CRP), to name a few.

General Use of Technology

Produce executives were asked to indicate the percentage of their produce transactions that employ each of the following: case coding, VMI, cross docking, continuous replenishment, EDI, and automated purchase order systems.

First, a review of the average retail firm for three points in time: 1994, 1999, and 2004. EDI is and is predicted to continue to be the most common type of electronic transaction employed by supermarket retailers in the produce department. Currently 20.7 percent of produce purchases is transacted via EDI transmission up from just 7.1 percent in 1994, and is expected to continue to grow to 52.4 percent in five years (Figure 5.1). Automatic purchase order systems and case coding are tracking along similar use and growth patterns. Although both are currently used for approximately 11 percent of produce purchases, by 2004 automatic purchase order systems will track 35.6 percent of produce purchases, and 40.4 percent

FIGURE 5.1

Use of Electronic Technology by Retailers, by Year

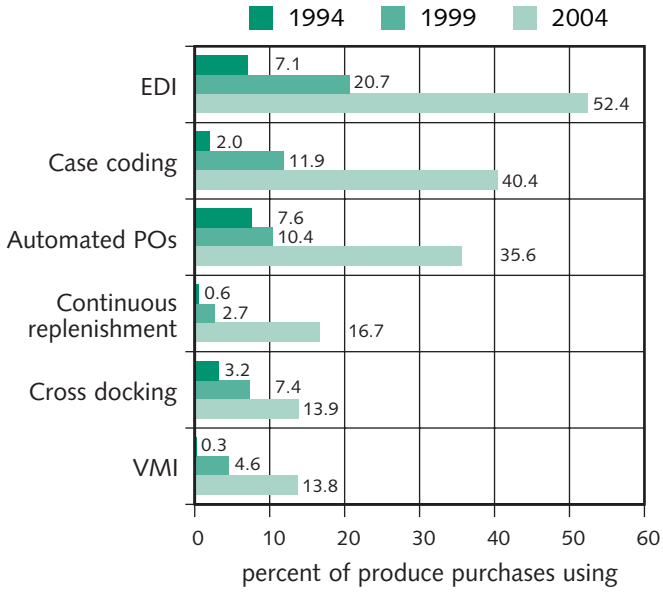


FIGURE 5.2

Use of Case Coding, VMI, and Cross Docking in 2004, by Firm Size

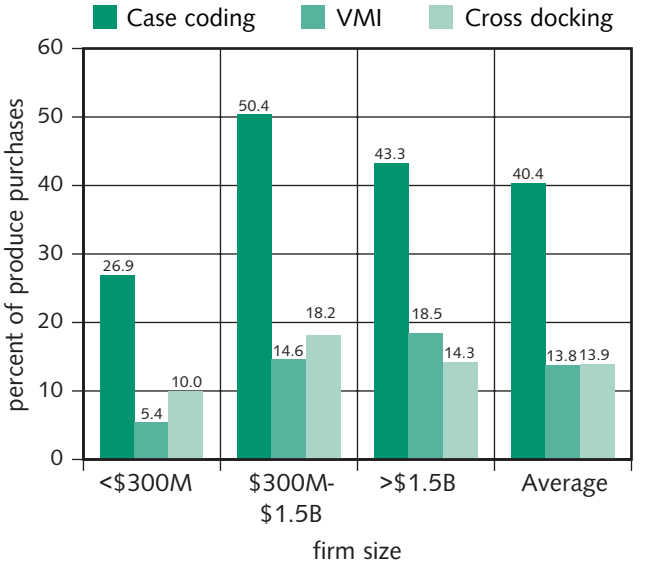
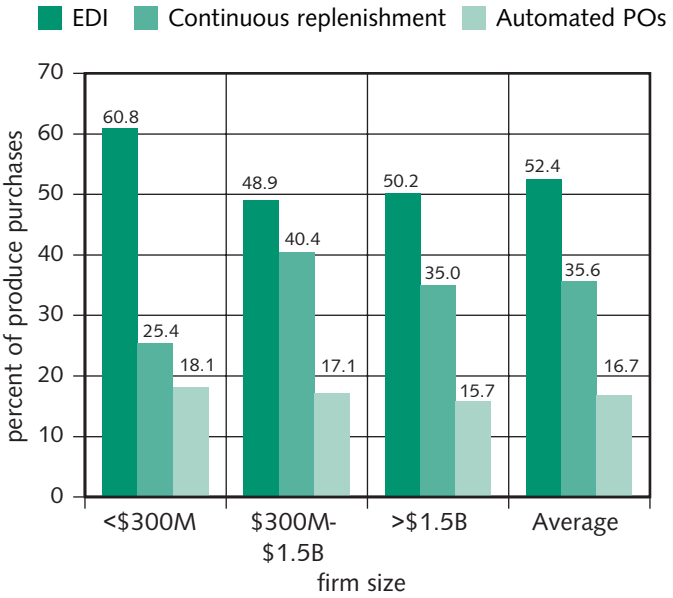


FIGURE 5.3

Use of EDI, Automated Purchase Orders, and Continuous Replenishment in 2004, by Firm Size



of orders will be electronically case coded. Continuous replenishment, VMI, and cross docking have yet to be fully integrated into produce purchasing operations and, in fact, do not appear to be among the "favorites" heading toward the twenty-first century.

Although the adoption rate of technology to facilitate various initiatives and transactions has been slower than expected to date, executives from all firm sizes predict phenomenal growth over the next five years. Looking toward 2004, EDI and case coding will continue to demand the greatest attention. Overall, medium-size retailers predict they will be leading the charge for three technology applications: applying case coding, cross docking, and automated PO systems—applying them to a greater percentage of their produce purchases than either large or small retailers (Figures 5.2 and 5.3). Large firms will utilize Vendor Managed Inventory the most while small-firm produce executives expect to lead the way with Continuous Replenishment Systems and EDI (Figure 5.2 and 5.3).

McLaughlin, *et al.* (1997) reported on current and expected use of technology among three primary channels of trade: mass merchandisers, supermarket, and drug for 1996 and 2000. Automated purchase

order systems and EDI were the two types of technologies most frequently used as 65.0 percent of total company volume utilized automated purchase order systems and 54.0 percent incorporated EDI into their purchasing departments (Figure 5.4). Continuous replenishment was used for 19.0 percent of purchases and was expected to grow to 42.0 percent by 2000. Although used for slightly more transactions than our produce executives have indicated, VMI and cross docking also fall far behind EDI and automatic PO systems in current and expected use.

ECR, EDI, VMI—The Alphabet Soup of Technology

Try picking up any trade publication or newspaper today and not finding a plethora of articles expounding the virtues and necessity of technology in our daily business lives. EDI, VMI, ECR and many other technological acronyms are the language of business today. How was business ever conducted before laptops became a mandatory personal accessory and information flew through the air at unimaginable speeds?

But could the focus on technology in the produce industry be mostly hype, or even just wishful thinking?

Retailers tell us that although they certainly employ technology in their produce buying offices and distribution centers, for many, they skim the surface of electronic technology in procurement and merchandising. They are quick to point out, however, that their use of technology will grow dramatically in the very near future.

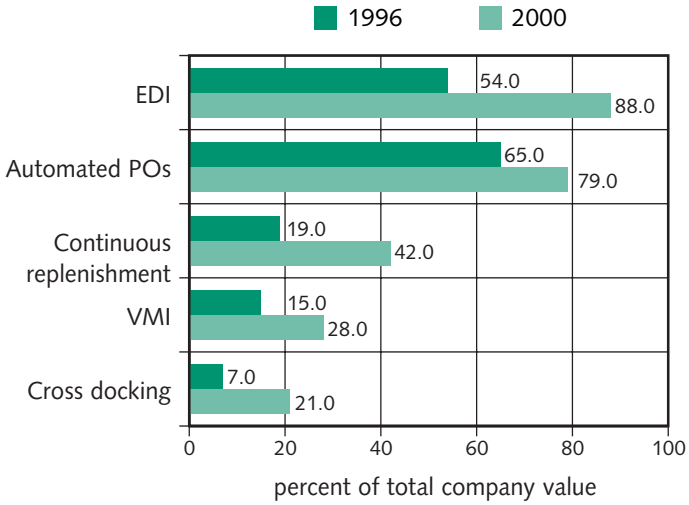
Are sales offices experiencing the same situation? Apparently the answer is yes. The majority of shippers interviewed discussed the vast potential of computer technology from email to Vendor Managed Inventory (VMI). When asked if they were actually employing these techniques, however, most shippers responded in the negative, "We're fairly limited to email and passing orders and information to another person's desk. We've really got a long way to go."

On the other hand, what has excited a number of shippers is their use of technology internally. "One of our big reasons for using it (technology) is not necessarily for our customers' use but for our sales peoples' needs. Let's say you get a fax from your customer Friday afternoon. The local market's involved and you are not sure on pricing, but rather than come into the office on Saturday morning to address the customer order, we now have a lot of sales people that just access their customer's order on line, see where the market is, and send their passings." And, "I send schedules to my field managers' houses at night for their start-up schedule the next morning rather than go into the office."

In addition, communications within the office are instantaneous. "If something is changing in the marketplace, with 12 people selling 35 different commodities it's hard to get the attention of people to get them to understand. With this new email system, it's awesome. I have put together a list, and (information) goes right on their screen. 'OK, no more iceberg, stop selling.' It's amazing how much easier that is than talking to 12 different people or going to the copy machine and putting notes on every person's desk...It's a helluva lot faster and it's accurate." ◆

FIGURE 5.4

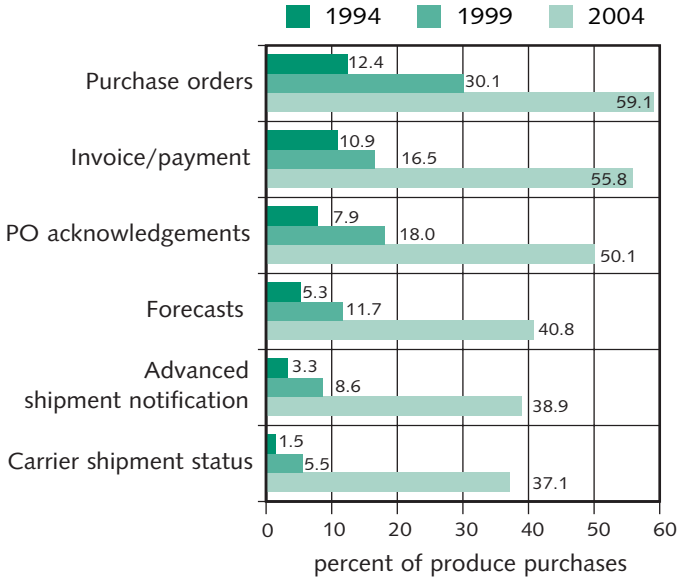
Use of Technology for Dry Goods, by Year



Source: McLaughlin *et al.*, 1997

FIGURE 5.5

Use of EDI Technology, by Year



Types of EDI Transmissions

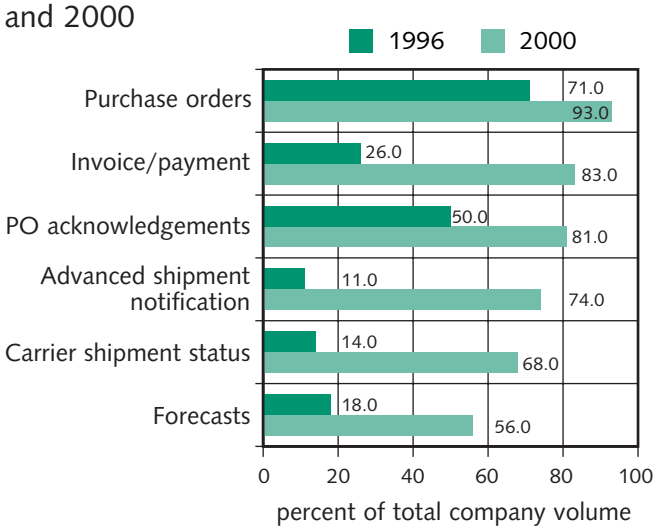
Produce retail executives were asked to further explore their use of EDI within the buying and transportation spheres of the produce business. Specifically, they were asked to indicate the percent of their purchases transacted using each of the following types of EDI transmissions: purchase orders (PO), invoice/payment, PO acknowledgements, forecasts, advanced shipment notification, and carrier shipment status. With the exception of purchase orders (30.1% of purchases), it is safe to say that all other forms of EDI transmissions are used rather infrequently by produce executives today (Figure 5.5). However, by 2004 the use of EDI for all types of transactions will grow dramatically, reaching to 59.1 percent for purchase orders, 55.8 percent for invoicing and payments, and 50.1 percent for electronic purchase order acknowledgments. It is interesting to note that the two types of EDI transmissions unrelated to the buying process—advanced ship notification and carrier shipment status—are employed the least both today and in five years. Clearly more attention is directed toward developing electronic capabilities that immediately facilitate the buying process. Although logistical applications are predicted to make tremendous gains they still remain in the shadow of the buying office.

Once again, when comparing responses from *FreshTrack 1999* with the McLaughlin HBC study, it appears that although produce executives are placing emphasis on similar uses of EDI, the produce buying office lags behind. In 1996, 71 percent of total company volume utilized electronic purchase orders (only 30.1% in 1999 for produce) while 50 percent of dry goods purchases in 1996 involved purchase order acknowledgments (only 18% in 1999 for produce) (Figure 5.6). Contrary to produce executives' somewhat low expectations for EDI transmission of advanced ship notification and carrier shipment status, executives represented in the 1997 McLaughlin study expected to see dramatic gains in the use of these technologies, with advanced ship notification rising from 11 percent in 1997 to 74 percent in 2000. The use of EDI to transmit information on carrier shipment status was only used for 14 percent of total volume in 1996 and was expected to soar to 68 percent by 2000.

For all firm sizes, produce executives expect to make significant gains in their use of EDI for all types of transactions by the year 2004. Looking ahead

FIGURE 5.6

Use of EDI Technology for Dry Goods, 1996 and 2000

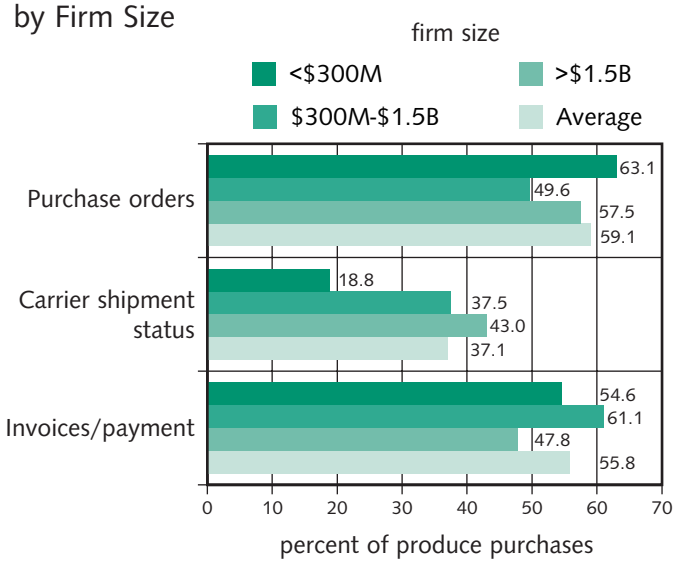


Source: McLaughlin, *et al.*, 1997

toward 2004, small firms expect to use purchase order systems the most—63.1 percent of their purchases—with mid-size firms coming in at 49.6 percent and large firm produce executives expecting to use purchase order systems for 57.5 percent of their produce transactions (Figure 5.7).

FIGURE 5.7

Use of EDI in 2004 for Invoices/Payments, Carrier Shipment Status and Purchase Orders, by Firm Size



The use of EDI to generate invoices and/or payments varies greatly according to firm size. Somewhat surprisingly, firms with sales in excess of $1.5 billion use EDI the least for all three points in time. Currently, only 8.4 percent of invoices/payments are transacted via EDI. By 2004, however, these large firms' buyers expect to utilize electronic invoicing/payments for 47.8 percent of purchases. In contrast, mid-size firms are the heaviest users of electronic invoicing/payments. Currently 36.1 percent of purchases use an electronic invoice/payment, and by 2004 these executives expect to electronically invoice and/or pay for 61.1 percent of their purchases (Figure 5.7).

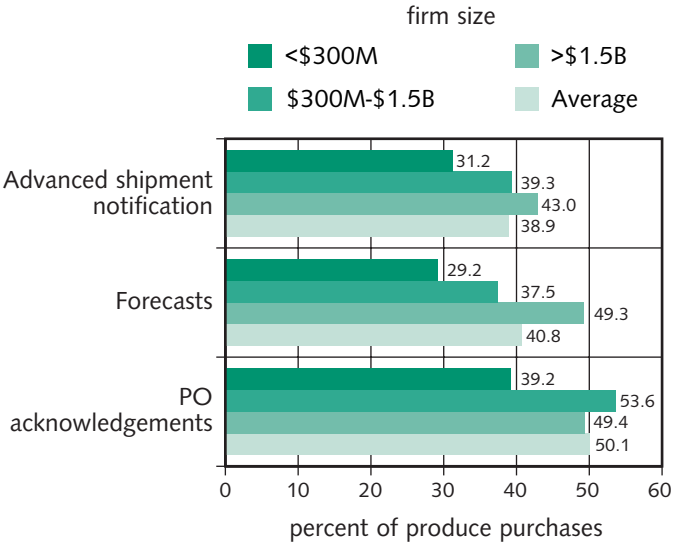
Utilizing EDI to transmit information on carrier shipment status is receiving the least amount of attention by produce executives. Currently, regardless of firm size, less than 8 percent of all purchases are tracked electronically. Although current use of electronic transmission of carrier shipment status is modest, produce executives predict dramatic growth in the use of this technology from just 6.3 percent for large firms today to 43 percent in just five years (Figure 5.7).

Mid-size firms expect to use purchase order acknowledgements for 53.6 percent of their purchases by 2004, with small firms falling far behind at only 39.2 percent (Figure 5.8). Large firms fall in the middle as 49.4 percent of their purchases are expected to be transacted using purchase order acknowledgements.

Utilizing EDI to facilitate forecasts and for advance shipment notification is utilized by all firms; however, large firms utilize both systems more frequently than either small- or mid-size firms (Figure 5.8).

FIGURE 5.8

Use of EDI in 2004 for Advance Shipment Notification, Forecasts and Purchase Order Acknowledgements, by Firm Size



Is EDI on the Back Burner?

When shippers were asked if they were using EDI, the vast majority said "no." Apparently frustrated with EDI, one grower/shipper commented, "Two years ago every letter we got talked about EDI. Today the new question is are we Y2K compliant!" Evidently, at least for now, the focus of information technology departments and the industry as a whole has shifted away from EDI to the more immediate challenge of becoming Y2K compliant.

Some shippers report that although they are not currently using EDI they had experimented with it with one or two retailers. However, grower/shippers commented, "It was the retailers who stopped using it." Why discontinue? One reason may be the difficulty of integrating people and technology. One participating shipper observed that EDI is a people issue, not just one of technology. People—buyers and sellers alike—need to integrate the whole process of buying and ordering. In this case, although EDI may have technically worked, it wasn't being integrated into the whole buying process. "There's a huge spectrum on what EDI can mean. I think it's too big to be able to put your hands around. It's how close you are with a customer or group of customers." However, for the few shippers actually using EDI techniques, their views were quite enthusiastic: "It gives you an edge over the competition since few of us actually use it." ◆

continued

Use of the Internet

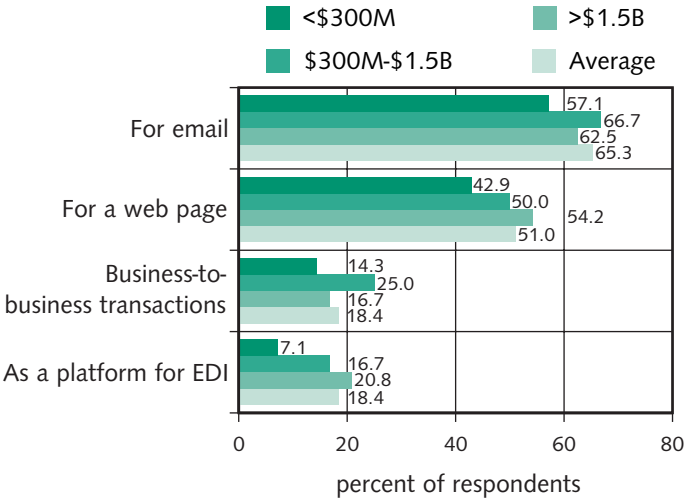
Much of technology today relies on the Internet as a platform to launch such initiatives as email, Web pages, business-to-business transactions, and EDI. Produce executives participating in this *FreshTrack 1999* study were asked to indicate which of these electronic transactions they are adopting within their buying offices. As might be expected, the use of the Internet for email is the most common initiative, as 65.3 percent of firms gave the nod to this application (Figure 5.9). This figure remains quite consistent for both large and mid-size firms; however, only 57.1 percent of small firm buyers currently use email compared to 66.7 percent of mid-size firms and 62.5 percent of large firms.

Utilizing the Internet for Web pages is the second most popular use of the Internet with 51 percent of all firms employing the Net for this purpose (Figure 5.9). Again, smaller firms appear to be slower to adapt as only 42.9 percent are currently using the Internet to launch Web pages, compared to 50 percent for mid-size firms and 54.2 percent for large firms.

The use of the Internet for business-to-business transactions is not widely accepted, nor are many firms using the Internet to serve as a platform for EDI transmission, as in both cases less than 19 percent of firms are using the Internet for either of these two functions (Figure 5.9).

FIGURE 5.9

Use of the Internet as a Platform for Select Applications, by Firm Size



Vendor Managed Inventory

Normally, nothing seems to get shippers more excited than asking them about their product. During shipper focus groups conducted for this project, however, shippers became just as excited discussing Vendor Managed Inventory (VMI).

Most of the discussion on VMI centers around its potential for changing relationships between buyers and sellers: "It's tough to do, but once you get someone dialed in, that customer won't leave you for a quarter on lettuce. That's your reward for pulling it off." A number of shippers feel that this reward—closer dependency between the shipper and the VMI account—is immensely attractive, especially since shippers have been concerned about diminishing personal contact with buyers.

In the future, shippers will also learn more about their customers' operations and needs. "Shippers who will be involved with this are also going to learn retail and whether they are actually doing VMI with other customers or not, just their knowledge base of how a retailer works is a benefit."

continued

One shipper predicts that the result of VMI will be, "More responsibility for the sale and the product at the department level will get handed back to the shipper. I just think that's a natural extension." And rather than complaining about these extra responsibilities, some shippers are excited about them. They anticipate the eventual increase in VMI. "It only makes sense to put back activities (to the shipper) to where they can be handled more efficiently." ◆

Wal-Mart: A Graduate School Education

Despite the hoopla being created within the shipper community, continuous product replenishment in the form of VMI is still very limited. Shippers across the country mention only two retailers when talking about VMI—Costco and Wal-Mart.

"Working with Wal-Mart is like going to graduate school for retailing." Comments like this indicate the respect that Wal-Mart has achieved among shippers. Wal-Mart has taken the lead and instituted sweeping measures to advance technology and formalize supplier relationships. In doing so, it is changing the very nature of produce marketing.

These two power houses, the fourth and sixth largest food retailers in 1998 respectively, according to *Chain Store Guide,* also happen to be nontraditional, alternative format food stores. Is VMI going to be another case of an alternative format shaking the foundations of traditional food marketing channels and instituting changes to how food is bought and sold?

Widespread support for VMI is not evident at the supermarket retail level. And, indeed, it would be premature to suggest that it can be easily implemented. Lack of uniform and universal

continued

product coding limits VMI to mainly fresh cut vegetables, packaged salads, and a few other commodities. However, retailers like Costco and Wal-Mart may easily gain early advantages by developing VMI systems. They have already gained the attention and respect of the shipper industry. ◆

Produce Department Technology: Summary and Perspectives

- Recent use of electronic technology in the produce industry appears to have stabilized. It looks as if concern over the infamous Y2K problem is at least temporarily placing EDI and all other forms of electronic technology on the back burner…at least until early in the year 2000.
- Applications of electronic technology discussed above benefit the produce buying office.
- Firm size does not appear to be an accurate predictor of electronic technology adaptation or use for such initiatives as EDI, VMI, continuous replenishment, etc.
- When it comes to applications using the Internet as a platform, small supermarket companies are lagging behind.

SECTION 6

Summary and Strategic Perspectives

The fresh produce industry has been and is projected in this study to remain one of the most dynamic in the food industry. Changes are occurring, in some cases rapidly, throughout the produce system. This study focussed particularly on those changes taking place in buying and selling practices at retail levels. These changes are summarized below. Some of the changes require little additional explanation beyond the background already covered in detail in the body of the report. In other cases, the changes are elaborated in this section with a number of perspectives on these changes from a firm-level strategic orientation. Concluding this section, we note a number of initiatives and opportunities that this study suggests for the grower/shipper community.

Produce Department Profile

- The share of retail store sales accounted for by the produce department has continued to grow for over 40 years. This study projects that trend to continue. As the produce department has become a more important reason given by consumers as to why they select their supermarket, it is not only the sales that have grown in importance, but, too, the status of the department, the professionalism of its employees, and the sophistication of the entire produce industry.
- The produce department is extremely profitable. In fact, when compared to its share of store sales, its profitability is considerably higher, suggesting that expanding produce sales further is likely to make a positive contribution to company profits. What's more, virtually every size retailer expects produce profits to grow even more in the future.
- Today's produce is commanding a larger proportion of the store footprint than in the past. The space allocated to produce departments is growing at a faster rate than the overall supermarket and is projected to continue to grow for at least the next five years.
- Despite growth in produce department size, the considerably faster growth in the number of new items has resulted in fewer produce facings for individual items in favor of additional SKUs. Since SKUs at both the warehouse and store continue to grow, it is reasonable to expect further compression of SKUs as produce managers squeeze ever greater numbers of items into a produce department, creating less visually impressive displays and difficulty in keeping items in stock.
- Despite more non-fresh items finding their way into the produce department, fresh items are still being added at a faster rate, suggesting a continued commitment of produce buyers and category

managers to keep the department primarily fresh. Conversely, purveyors of non-fresh produce items may have a more difficult challenge in the future as retail managers attempt to limit more of their space to fresh products only.

The Buying Process

- Although the food retail industry is going through a period of unprecedented consolidation, it does not appear from this research that this consolidation has yet had a major impact on the organization of retail produce buying offices. Today, in total, there are more buyers and category managers per individual firm than ever before. However, it is also true that since there are fewer retail companies than ever before, there appears to be a smaller universe of retail than there was in the past. Today's smaller number of retail buying offices means that each has control over a much-expanded share of overall produce procurement than in years past.
- A produce buyer's job still revolves around supplier negotiations. Furthermore, so does a category manager's. These findings underscore a number of important realities in the contemporary produce system. First, negotiations between more sophisticated buyers and sellers are more complex and grow in importance as consolidation with both buyers and sellers makes each account more important. Second, most produce buyers are more oriented to the supply side of their business—procurement and logistics—than they are to the demand side and consumers. This is particularly true for buyers from large firms. Produce retailers from small firms spend relatively more of their time conferring with store-level personnel while their larger firm counterparts spend relatively more time looking backward in the channel at procurement and logistics issues. Third, similarly, despite a marketing awakening of most retail firms in recent years, retailers as a group still appear more prepared to improve their profit picture by trimming product cost than by enhancing final sale conditions.
- The role of produce wholesalers, although declining modestly, still appears to represent a continued valuable "insurance policy" for retailers. Produce wholesalers are rarely used by major grocery wholesale or retail companies for the procurement of a principal commodity, but they continue to be regularly relied upon for "fill-ins" and "shorts" and small batch specialty items.
- Produce buyers from all firms indicate a preference toward purchasing greater quantities of their produce needs direct from grower/shippers. The traditional terminal market is increasingly being bypassed by the major wholesale and retail companies.
- The survival of produce brokers may be at risk. Today, all produce retailers, regardless of size, consummate fewer broker-facilitated transactions than ever before. Furthermore, this downward trend is expected to continue.
- Produce executives want to do more of their business with "preferred" suppliers. The percentage of produce purchases procured from a retailer's "top ten" suppliers has risen and is expected to continue to rise.
- Will the "opportunity buy" disappear along with the 20th century? Probably not, however several key indicators—a decreasing percentage of produce procured this way, little category management time devoted to developing opportunity buys, and an increase in contracting—point to a diminished role for opportunity or investment buying in the future. Opportunistic buying-selling, where one or the other party finds itself facing unusually unfavorable short-term conditions, appears to be fading.
- Most grower/shippers take a tentative approach to contracting despite most retailers advocating it. Nearly three-fourths of large retailers report that by 2004 they will be contracting for over 25 percent of their produce needs. Grower/shippers need to take note: those not prepared with the marketing flexibility, crop planning information, and experience to make contracting a win-win

situation are not likely to retain the continued business of ever-more sophisticated and risk-averse retail accounts. Those grower/shippers who have developed a positive track record within the contracting arena will be favored as retailers of the future choose their trading partners.

- While many buyers see only limited downside risk from engaging in contracts, grower-shippers often see a different, arguably more complete picture. For grower/shippers, contracts cut both ways. They cite certain advantages created by contracts but point to a significant number of disadvantages as well. The following serves as a brief summary.

Advantages of contracts:

- Greater price certainty for both buyers and sellers—this aids in planting and removal decisions of producers. This certainty would be especially advantageous to growers in large-crop, low-price years when the contract price would likely be higher than the open market "spot" prices.
- Better knowledge of the quantities to be sold, in the short and long run, which facilitates field production planning for growers, harvesting and packing for shippers as well as procurement and ad scheduling for wholesale-retailer buyers.
- Contracting may stimulate large distributor and retail firms to conduct more long-term market and demand analyses for fresh produce, including advertising and promotional effectiveness. Such firms are generally better able to bear the risks of such investments than are growers and grower organizations.

Disadvantages of contracts:

- When weather reduces the overall crop to a particular grower in a given year, his returns may be significantly reduced since they are generally based on tonnage delivered. Thus, the grower is significantly disadvantaged relative to buying customers in his own short-crop years.
- Despite improvements in supply and market-place forecasts, there is still substantial risk involved in predicting probable economic and market conditions in the future, for both buyers and sellers.
- Whenever open market prices are substantially different from contract prices, there will be substantial incentive for one party or the other to find a way to avoid performance. Either way, risk of contract non-performance would be significant. Grower/shippers are particularly nervous about this potential difficulty in long crop years when they fear that powerful retail customers will simply expect that prior commitments be expunged in favor of short-run, low-price conditions.

- Contracting reduces flexibility for buyers and sellers since they are both prevented from "playing the market." Additionally, buyers lose "product flexibility."
- Contracting may increase the price variations in the noncontracted portion of the market.
- Large retailers appear to enjoy several transportation-related advantages. They are able to use more economical straight loads and fewer mixers; they arrange for and thus control a greater percentage of transport; and they receive a greater proportion of overall arrivals "on-time." As a share of their total produce procurement costs, their transport costs are, by a small margin, the lowest of all retail firm sizes.

Supplier Profile

- Until 1999, retail produce executives have continued to expand their cadre of suppliers. However, they predict that they will reduce the number of suppliers in the future to a smaller number, each of whom will become a stronger

partner and source of continuous produce support. Over ten percent of their suppliers will be dropped over the next five years by large retailers. Furthermore, retailers predict they will be utilizing their "top ten" suppliers for greater percentages of their produce purchases than ever before.

- One of the leading preferred attributes outlined by produce executives for grower/shippers is "large enough supply to fill demand for a majority of stores." This is a danger signal to small grower/shippers who may not be able to accommodate this request. Responses are required (see below).
- Retailers also indicate a very strong preference for year-round product supply, a preference that has increased over each of the past several surveys by every size category of retailer. This places pressure on grower/shippers to develop a year-round supply if they do not already have one.
- Although formal vendor performance guidelines are becoming standard operating practice among produce buying offices, enforcement appears to be selective, at least for now.
- Unlike practices in the grocery industry, neither supplier-funded promotions nor so-called "channel development" funds (e.g., volume incentives, slotting allowances, etc.) are commonly offered in the produce industry, due both to fragmentation at the supplier level as well as the commodity nature of the business.
- Despite the availability of nearly instantaneous and efficient modes of communication (email, EDI, fax), the telephone still dominates all other communication modes within produce buying organizations.

Produce Department Technology

- Although concerns over the Y2k problem have temporarily moved the adoption of electronic technology in the produce industry to the back burner, at least until early in the year 2000, produce retailers predict an enormous leap in their use of new electronic means of communication by the year 2004. The utilization of nearly all forms of electronic technologies are expected to double or triple in only five years' time. Over half of all produce will be procured using various forms of EDI.
- Applications of electronic technology discussed above favor the produce buying office.
- Firm size does not appear to be an accurate predictor of electronic technology adoption or use for such initiatives as EDI, VMI, continuous replenishment, etc. All firm sizes are equally enthusiastic about electronic technology adoption.
- When it come to applications using the Internet as a platform, small supermarket companies lag behind.

Shippers' Responses to Industry Change

The objective of this study was to document the rapid changes taking place in the produce industry, particularly from the vantage point of the retail sector. Emerging from the retailer perspectives above and from the many interviews and focus groups sessions held with shippers around the country are a number of strategic responses from shippers. Some of these responses have already been put into place by certain firms; others are potential responses that belong to a category perhaps better termed "strategic opportunities."

The following responses are already strengthening shippers' competitive conditions for the firms that have adopted them. Others should consider similar initiatives.

- **Expand control, horizontally or vertically.** Firms in virtually every industry are consolidating, particularly at buyer levels. Still more consolidation in food retailing is sure to follow. In order to compete and be able to supply the new, larger volumes required by many of today's larger customers, suppliers need to consider expansion in one or more ways.
  - **Consolidate horizontally.** Acquire, merge, and/or form alliances with other grower/shipper organizations. Means need to be found to coordinate with other grower/shippers to obtain the supplies required to do business with ever-larger wholesale and retail accounts. Organizational opportunities include joint sales agencies, various forms of cooperative activity, contracting, and new creative equity alliances.
    - Become a multi-region and/or multi-commodity shipper. This means expanding the product line by extending into new commodities and/or new geographical regions to become more of a "one-stop shopping" source of supply on more of a year-round basis.
  - **Integrate vertically.** Although vertical integration is common in the produce industry among growers, packers, and shippers and between wholesalers and retailers, there have been very few attempts at vertical organizations that bridge the gulf between grower/shipper and wholesaler/retailer. Yet such innovative arrangements may be a breath of fresh air for the traditional industry structure. Moreover, many growers may be well served by considering aligning themselves more formally with packing and selling companies. Otherwise, the picture for certain agricultural producers may be dim: if they are not adding value in meaningful ways, they will be able to claim only whatever system residual is left, if any, after others have extracted their returns. Many of the newly forged "partnerships" between produce shippers and retailers, although short of formalized ownership integration, are certainly steps in the direction of more effective vertical coordination.
- **Develop new products.** Adapt current products to keep abreast of changing consumer and wholesale/retail customer needs.
  - **Experiment with new packaging.** New packaging must be consistent with customers' needs for minimum handling, JIT delivery, recyclibility, convenience, and food safety.
  - **Employ new hybrids.** Take advantage of new plant varieties, bio-technological developments, and innovations in genetically modified foods to introduce new products.
  - **Rely on specialized products.** Not every shipper needs to achieve the status of a major volume supplier. Indeed some of the most profitable businesses over time are those that restrict themselves to the specialized business that they know best. Retailers are virtually unanimous in continuing their preferences for local and regional products from small and medium size firms. However, relegating oneself to fringe status does place certain constraints on long-term growth.
  - **Undertake demand expansion programs.** Advertising and promotion are essential components in any business firm, including agricultural firms. Whether using firm-specific promotional messages or participating in national or commodity generic advertising programs through a commodity organization, demand expansion is critical. Both consumer directed messages and messages directed to the wholesale and retail trade are needed. Finally, in-store promotion has been shown to provide substantial increases in the sales of fresh produce and, where appropriate, should be encouraged frequently by both buyers and sellers.

- **Adopt cost-reducing technology.** Being the low-cost producer has been and will remain a requisite of successful suppliers. Technology throughout the food and produce systems is undermining the need for capacity and increasing the drive to cut costs. Beginning in the field and continuing all the way through packing, sales, and transportation functions, shippers should employ the latest in technology in order to remain efficient, remain competitive, and provide the highest quality and consistency.
- **Develop new distribution systems.** Innovative channels of distribution are rapidly becoming available. Some shippers are establishing processing facilities, distribution centers, and ripening rooms closer to customers' markets in attempts to provide better service. The anarchic world of the Internet presents the produce industry with a bewildering array of opportunities. Though the winning combination of product, services, and mode of delivery remains a puzzle, the costs of entry are marginal: little capital is needed to start a site or a service. Yet the competition is fiercer in this virtual reality than it is in the supermarket. Currently, margins are razor thin, if they exist at all, and profits are hard to come by. But this will change. The bold firms who innovate will reap profits.

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The Produce Marketing Association is a nonprofit trade organization serving 2,500 members who market fresh fruits, vegetables, and floral products worldwide. The association's mission is to create a favorable, responsible environment that advances the marketing of produce and floral products and services for North American buyers and sellers and their international partners. PMA offers a variety of reference and training materials. For more information, contact: PMA, 1500 Casho Mill Road/PO Box 6036, Newark, DE 19711-6036; Telephone: (302) 738-7100; Fax: (302) 731-2409; WWW: http://www.pma.com.

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