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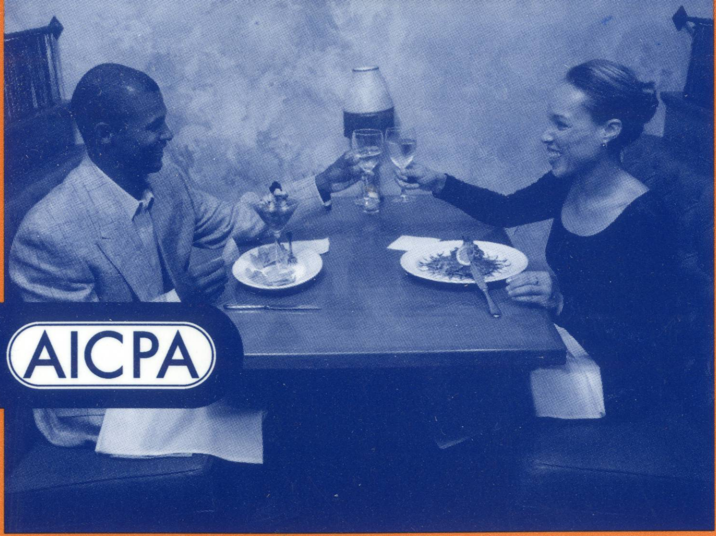
CPA's guide to restaurant management strategies : accounting, cost controls, and analysis;

Marsha Huber



American Institute of Certified Public Accountants

A CPA's Guide to Restaurant Management Strategies: Accounting, Cost Controls, and Analysis

Marsha Huber, CPA

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FOREWORD

In most neighborhoods you can look around and see at least one, and possibly more, empty storefronts or buildings that used to be restaurants. Or maybe there is one location that has housed a variety of restaurants, of different types, but with one thing in common: they all failed. Restaurants make up a $336 billion industry with over 880,000 eating establishments of different kinds. Over 9 million people work in this industry. Since the average profit margin for a restaurant is 4-6%, proper management is crucial to success.

Key success factors in the foodservice industry are controlling costs, maximizing sales, and attracting and retaining customers. It's not enough to serve good food.

This publication has the most up-to-date information on using available systems and accounting analysis to help the restaurants you are associated with to succeed, whether they are your employers or your clients.

We would like to thank Marsha Huber, MBA, CPA of Huber Consulting in Westerville, Ohio for writing this publication.

Linda Prentice Cohen, Publisher
Professional Publications and Technology Products

PREFACE

This book consists of seven chapters. The first introduces you to the foodservice industry, explaining the types of restaurants and the organizational structure. Chapter 2 explains accounting rules for restaurants, and Chapter 3 teaches you to use the financial information to analyze restaurant operations. Chapters 4 and 5 explain how to control food and bar costs, and Chapter 6 discusses labor management. Finally, Chapter 7 lists many sources of information you can use to learn more about foodservice operations. The appendices include a bibliography and list of vendors of restaurant management products.

ACKNOWLEDGMENTS

The author would like to especially thank her friend, Brian Jones, CPA of Columbus, Ohio, who edited every chapter and gave her numerous suggestions on how to improve the book.

She would also like to thank the following companies: Valerian's Restaurants of Columbus, Ohio, for allowing her to participate in their management training program on the Sable Technologies point-of-sales system in San Mateo, California and the staff of Easybar Beverage Management Systems of Lake Oswego, Oregon for explaining bar management systems to her.

The author is also grateful to Otterbein College and Otterbein's White Endowment Fund of Westerville, Ohio for supporting her in writing this book.

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CHAPTER 1

OVERVIEW OF RESTAURANT INDUSTRY[1]

INTRODUCTION

The restaurant business is large and varied. It is a $336 billion industry with over 880,000 eating establishments. Restaurants employ more than 9 million individuals and are the largest employers of teenagers. One-half of all adults eat at a restaurant on a typical day.

Good customer relations and cost-conscious management practices are essential for restaurant success. Food, beverage, and labor costs are the primary expenses for most food establishments. These costs, known as "prime costs," may account for as much as 60% of total restaurant costs. The average profit margin for a restaurant is 4% to 6%.

The National Restaurant Association projects annual sales increases to be 3% to 4% in the 2000's. "Value for your money" is the consumer slogan of the 2000's. Consumers are unwilling to accept high menu price increases as a means of increasing restaurant profitability. As a result, restaurateurs must depend on increased operational efficiency and the use of technological innovations as a means of increasing their profits.

Key factors for food service success are: (1) controlling costs, (2) maximizing sales, and (3) attracting and retaining customers. Quality of food and service are additional factors contributing to success.

Today's restaurant exists in a dynamic, competitive environment. Exhibit 1-1 "Characteristics of the Restaurant Industry" lists seven common characteristics of the restaurant industry. A restaurant's success depends upon management's ability to meet the many demands of the changing market.

TYPES OF RESTAURANTS

Restaurants are classified into three groups by the National Restaurant Association (NRA): (1) full service (average check per person under $10), (2) full service (average check per person $ 10 and over), and (3) limited service fast food restaurant.

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[1]Statistics cited this chapter and its exhibits are from National Restaurant Association and Deloitte & Touche LLP, *1998 Restaurant Industry Operations Report*, 1998 (New York: National Restaurant Association). For more information see http://www.research@dineout.org.

INDUSTRY STATISTICS

The largest segment of the restaurant industry is made up of limited service fast food restaurants (also known as quick service). This segment accounts for 48.7% of all eating establishments. Quick service restaurants are known for their value for the dollar. Bundled menu items, often called value meals, offering a main entree with a side dish and beverage, are popular. These items are easy for consumers to order and easy for restaurants to service.

Full service restaurants make up the second largest segment of the market with 30.3% of the market. Today's consumer expects superior food quality and service at a full service restaurant. Socializing with family, friends, and coworkers is becoming a favorite pastime of many customers, so the ambiance of a restaurant has become increasingly important to the consumer. Restaurateurs must take care in their selection of theme, architecture, decor, and landscaping. Almost six out of ten foodservice operators believe restaurants need remodeling every six years in order to generate consumer excitement. With this statistic in mind, two out of three operators have remodeled their restaurants in the last two years or plan to do so in the near future.

Full service restaurants tend to have the highest labor costs partly due to the need for expensive cooks, greeters, bussers, and servers. On the other hand, full-menu restaurants have the lowest food and beverage costs in comparison to the other types of restaurants.

FAST FACTS ABOUT EACH RESTAURANT CLASSIFICATION

At a full service type restaurant, the customer is seated and waited on by a server. The *full service restaurant (average check under $10)* has a median check of $7.50. This type of restaurant reports the net income before tax at 4.7% and a median cost of sales of 33.3% of sales. The most popular menu theme is American and 72% serve alcohol.

The *full service restaurant (average check over $10)* has a median check of $15.00. They report an average net income before tax of 3.6% and a median cost of sales of 33.5% of sales. Over 36% of these full service restaurants report an American menu, 20.7% report a steak/seafood theme, and over 96% serve alcohol.

The *limited service fast food restaurant* has an average check of $5.00. The average net profit before taxes is 5.7%, and the cost of sales is 32.3% of sales. About half of fast food restaurants offer a sandwich/sub/deli menu and the majority do not serve alcohol.

It is important to understand the basic differences among food establishments in order to better advise clients. In summation, important distinctions among the three restaurant types are as follows:

- The most profitable type of restaurant (at 5.7%) appears to be the limited service fast food type. Payroll costs are lower since servers, bussers, greeters, and chefs are not needed in a quick-service restaurant. Also, dishwashing needs are also limited to kitchen items, since food and drinks are served with paper products.

- The full service (average check under $10) restaurant is the second highest profitability at 4.7%.
- The full-menu restaurants in general have the highest labor costs.
- Food and labor costs for quick-service restaurants average 50% in comparison to full-service restaurants, which average 60–70% of total sales.

The National Restaurant Association publishes an annual operational report for each type of restaurant giving statistics and discussing trends. Statistics include, among others:

- Average check;
- Average daily table turnover;
- Cost per dollar of sales;
- Number of employees;
- Employee turnover;
- Common-size income statements;
- Income per square foot; and
- Income per seat.

Later in this book, we will look at the significance of these statistics.

ORGANIZATIONAL STRUCTURE

Restaurants vary in organizational structure. The size of the restaurant determines how management is organized. A small restaurant might have an owner/manager running the operation while a large restaurant might have several different managers running different aspects of the operation. Exhibit 1-2 "Sample Organization Chart" give one example of how a large restaurant might organize its personnel.

The following job descriptions outline the basic duties of all typical personnel employed in a restaurant. Because of the diversity among restaurants, some of the duties among personnel are interchangeable. For example, the general manager might order inventory, which is often the duty of the kitchen manager.

GENERAL MANAGER

General managers report directly to the owner. General managers are responsible for daily operations and might be responsible for scheduling, staffing, advertising, ordering supplies, and counting inventory. They oversee the assistant managers in their various functional areas. The bookkeeping function might also be the general manager's responsibility. In other words, the general manager is the "head honcho." Ultimately, the general manager is concerned with restaurant profitability and customer satisfaction.

KITCHEN PERSONNEL

Kitchen Manager. Kitchen managers are supervisors that oversee all kitchen personnel. Their main concern is to delegate work and achieve operational efficiency. Kitchen managers order, receive, and store all inventory. The inventory requirements must be adjusted to meet the changing demands of season, weather, or events. In addition, the kitchen manager oversees the preparation of the food, and the maintenance of the kitchen, including dishwashing and sanitation.

Chef. The chef is responsible for recipe development, management of the cooking personnel, and the preparation of quality food. In some establishments, the chef is the kitchen manager; in others, the chef is subordinate to the kitchen manager. The chef is directly responsible to the general manager. In some organizations, the chef is responsible for ordering inventory.

Preparation Cooks. Prep cooks are subordinate to the kitchen manager and chef. They prepare foods according to the recipes, receive and store inventory, maintain a clean kitchen, and follow all health and safety regulations. They prepare food for use later by the line cooks and chef. Waste may occur if the prep cooks do not meticulously follow the recipes and restaurant preparation guidelines.

Line Cooks. Line cooks are responsible for the consistent cooking of the restaurant's menu items. They must ensure that the food has been prepared properly by the prep cooks before serving it. The line cooks must prepare the food according to customer specifications. The line cooks are the last quality control point before the food is given to the server.

Expediter. Expediters regulate the flow of work in the kitchen. In some restaurants, expediters receive order tickets from the servers and communicate the order to the cooks. In a point of sale restaurant, a computer terminal would perform this function. The expediter is also responsible for placing garnishes on the plates and double-checking the order to make sure it is prepared according to the ticket. The expediter must also make sure all food leaving the kitchen area is billed to a customer.

Expediters examine all the food orders before they are taken to customers. This adds one more step of quality control beyond the line cook. The disadvantage of using an expediter to perform this function is the additional labor costs.

Dishwasher. Dishwashers are responsible for cleaning dishes, flatware, and kitchen utensils. They must take care not to break dishes or trash silverware. Dishwashers must also ensure that partially cleaned dishes or flatware are rewashed and not taken to customers.

DINING ROOM PERSONNEL

Dining Room Manager. Dining room managers are in charge of all dining room functions and services. They direct the training of the servers, greeters, runners, and bussers. The dining room manager also deals with customer complaints and completes the weekly work schedule.

Greeter. The greeter is a host or hostess. Greeters greet customers and ask them for their seating preference (i.e., smoking or non-smoking). They also take reservations and book special parties. They may be in charge of some clerical duties such as comparing kitchen menus with customer menus, reviewing customer checks, closing out the cash drawer, making out a linen report, or reporting customer complaints or compliments to the manager.

Server. A server is a waiter or waitress, also called waitperson. Servers play the primary role in customer satisfaction since they have the most contact with the customer.

Servers tell the customers about any daily specials, answer questions, and take the food order. Servers are responsible for recording the number of guests and table number on the check, and for taking an accurate and legible order for the cooks. The server brings out the drinks, salads, main course, accompaniments (e.g., rolls), and desserts. Servers should also note whether the food is properly prepared and garnished before delivering it to the table. As the meal progresses, the servers should remove the dirty dishes making for a more pleasant dining experience. After the customer leaves, the server might reset the table.

Exhibit 1-3 “Characteristics of Good Service” describes characteristics of good restaurant service.

Bussers. Bussers relieve servers of several duties discussed above. Bussers refill drinks and remove dirty dishes. Bussers also set tables after the customer leaves. By bussers performing these responsibilities, servers can better concentrate on serving customers and are able to wait on more tables.

Runners. Runners are used by some restaurants during their busy hours. The runner takes the food to the table to help out the servers. This frees up the servers’ time so that they can focus on waiting on their current and new customers. Faster service will also help increase a restaurant’s table turnover rate.

Server Assistants. Server assistants assist the servers, and fill the role of the busser and runner.

BAR PERSONNEL

Bar Manager. Bar managers oversee bar personnel and are responsible for liquor purchases and ordering. Bar managers must also ensure that liquor is secured in a locked storage room and removed only by authorized personnel. They should be held accountable for maintaining an adequate stock of all major brands of beer, wine, and liquor.

Bartender. Bartenders must be familiar with the preparation of all alcoholic beverages. They must greet customers, control waste, follow drink recipes, charge for all drinks prepared, and check I.D.s. Bartenders must also be knowledgeable about liquor liability laws. For example, they must know how to deal professionally with customers who become intoxicated while dining at the restaurant.

Cocktailers. Cocktailers serve drinks to the customers in the waiting areas, lounge, and dining rooms. The cocktailer is the second personal contact that the customer has with the restaurant after the greeter. Therefore, it is important for cocktailers to be pleasant and proficient in taking drink orders so that customers gain a favorable impression of the restaurant. Cocktailers also need to have a thorough understanding of all types of alcoholic beverages so they can make suggestions and take accurate orders. The cocktailer is responsible for collecting for the drinks immediately or adding the charges to the customer's check.

OTHER PERSONNEL

Manager-in-Training. Due to the high turnover in the industry, many restaurants have a manager-in-training. This is an individual who is training to become a manager at a different location or to replace a manager who leaves the current establishment. Often, managers-in-training will begin their training in the kitchen. They will perform and learn all of the kitchen duties including dishwashing, preparation, and cooking. The in-depth kitchen training also helps the manager-in-training to become familiar with all the recipes and how meals should taste and look.

Mystery Shopper. A mystery shopper is not a regular employee, but a hired agent. Periodically, a shopper goes to a restaurant and orders a meal. Shoppers take notes regarding the time it takes for them to be seated, the time it takes the server to arrive at the table, the time it takes the meal to be prepared, whether the server suggests appetizers or desserts, the cleanliness of the dining area and bathrooms, and whether or not the server and other personnel are courteous. After the dining experience, shoppers will report their experience to management, and management should then correct problem areas or reward good performance. The mystery shopper is a unique and inexpensive type of quality control. Most shoppers are not paid for the service, but are reimbursed for their meals.

CONSUMER TRENDS

Consumers view the restaurant as a place to relax and a get–away from the stresses of daily life. The NRA reports that half of all restaurant customers are interested in dining at a lively, entertaining full-service type of restaurant. Other consumers have expressed interest in self-service food bars, free samples of menu items, and frequent-diner programs. Baby boomers, many of whom are currently raising families, have communicated interest in children's menus.

Interest in nutrition is another key consumer trend. To meet this need, many restaurants now offer low fat meals and usually identify "light" meals on the menu with a red heart. Some restaurants actually list the number of calories and fat grams for selected meals on their menus. Computer software is available to calculate calories and fat content.

Certain segments of the population are growing, thus influencing restaurant practices. The high number of newborns is causing demand for children's menus. The senior citizen population has created a demand for senior citizen menu items and discounts. Double income couples and working women often dine out or pick up fast-food because they do not have the time to prepare home cooked meals. As a result of the diverse population within the United States, interest in ethnic foods is growing.

Consumers are becoming more sophisticated in their food tastes. Menu items that are gaining in popularity are pastas, ethnic foods, salsa, bagels, baked goods, cappuccinos, rotisserie chicken, and desserts. Many customers do not seem to mind paying a premium price for a little indulgence.

The 1994 Tableservice Operator survey conducted by the NRA asked foodservice operators for their perceptions of the popularity of certain menu items. The operators reported that customer interest has increased in the following areas:

MENU ITEMS GAINING IN POPULARITY (top six)

- Beautifully Presented Food
- Food Rich in Flavor
- Food Suitable for Carry-Out
- Unique Flavors
- Low-Fat Dishes
- Espresso, Cappuccino, and Latte

It is a challenge for restaurateurs to keep current with the ever-changing demographics and food trends. The NRA tracks consumer trends regularly. Their publications can be used to help food operators to design their menus accordingly.

OPERATIONAL EFFICIENCY

As mentioned earlier, "value for the money" is the consumer slogan for the 2000's. Consumers are expecting value for the money paid for their meal. Therefore, restaurateurs should increase operational efficiency before considering menu price increases.

There are many key opportunities to increase operational efficiency. Some of these include establishing or improving controls in the following areas:

- *Food and Bar Costs–Controlling* food and bar costs is difficult. Management must monitor inventory from arrival to its preparation and service in order to minimize waste.

- *Labor Costs–Managers* must exercise control over labor costs. Labor costs can be reduced through efficient scheduling and the use of a computerized timekeeping system.

- *Menu Analysis and Planning–Menu* engineering and design can increase food and beverage sales. Menu engineering involves learning which menu items are high volume/high profit; high volume/low profit; and low volume/low profit. With this knowledge operators know which items to promote, delete, or move to another spot on the menu.

- *Table Management–The* arrangement of tables affects the flow of service within a restaurant. Effective table management concerning the seating of customers will also affect the table turnover rate. Setting up smoking and non-smoking areas to meet demand is another table management issue.

- *Energy Management–Proper* use of equipment and utilities can control utility bills. Following the procedures concerning the turning on and off of equipment can minimize utility bills.

In future chapters, restaurant controls as well as the many technological advances in the field will be discussed in detail. Today there are many different types of technological and software innovations that can work to improve restaurant efficiency. Using a computerized timekeeping system can save labor costs. Software is also available to help manage seating and reservations and in developing menus.

SUMMARY

- The restaurant business is a large and growing industry. Restaurant success depends on controlling costs, maximizing sales, and providing customer satisfaction.

- There are four types of restaurants with unique characteristics: full service (average check under $10), full service (average check over $10), fast food, and cafeteria service.

- Organizational structures vary within restaurants. In most cases, a restaurant will have a general manager who oversees the kitchen manager, bar manager, and dining room manager.

- Consumer trends are constantly changing. Today's sophisticated consumer enjoys items such as low–fat foods, baked goods, cappuccinos, pastas, and rotisserie chicken. The increase in newborns, working women, double income couples, and senior citizens affects restaurant trends today.

Operational efficiency is the key to increasing restaurant profitability. Efficiency can be improved in areas such as costs, menu offerings, and management.

EXHIBIT 1-1

CHARACTERISTICS OF THE RESTAURANT INDUSTRY

(1) SLOW GROWTH

The NRA projects growth to be 4% per year in the 2000's.

(2) LOW MARGINS

The average net profit before taxes is 4 to 6%.

(3) LABOR INTENSIVE

Young workforce with high turnover.

(4) COMPETITIVE

Restaurants must compete for clientele.

(5) CONSUMER-ORIENTED

The typical customer will usually not return to a restaurant after one bad experience.

(6) TREND SENSITIVE

The 2000's population is value-oriented and nutrition sensitive.

(7) SUSCEPTIBLE TO WASTE AND THEFT

Keys to profitability include control of food, beverage, and labor costs.

EXHIBIT 1-2

SAMPLE ORGANIZATION CHART

- Owner(s)
  - General Manager
    - Kitchen Manager
      - Chef
        - Prep Cooks
          - Line Cooks
            - Expediters
              - Dishwashers
    - Dining Room Manager
      - Servers
        - Bussers
          - Runners
            - Greeters
    - Bar Manager
      - Bartenders
        - Cocktailers
    - Manager-in-Training

EXHIBIT 1-3

CHARACTERISTICS OF GOOD SERVICE

(1) Pleasant greeting from greeter and prompt seating.

(2) Server promptly arrives at table, acknowledges the customer, and takes beverage order.

(3) Table is clean and set with dishes and flatware in good order.

(4) Server recommends appetizers, wines, cocktails, and describes any daily specials.

(5) Order is taken and salads and accompaniments (i.e., rolls) arrive quickly.

(6) Water, coffee, and drinks are served and refilled during the meal.

(7) Food is of high quality and served at the appropriate temperature.

(8) Dirty dishes are cleared off the table as the meal progresses.

(9) Dessert is suggested and served.

(10) Server checks periodically on the customers to meet their needs.

(11) After the meal, the customer check is delivered to the table and promptly settled.

(12) Customer is thanked for visiting the restaurant.

CHAPTER 2

ACCOUNTING FOR RESTAURANTS

INTRODUCTION

Understanding the financial statements is essential to any restaurant's success. A restaurant's financial statements reveal whether or not a restaurant is profitable and if management is doing its job. Also, the financial reports and ratios give insight as to whether or not the restaurant's cost controls are working.

Accuracy in the recording and tracking of sales and expenses is essential for evaluating operating results and controlling costs. The majority of a restaurant's costs are in food, beverages, payroll, and energy. Common problem areas include waste, pilferage, spoilage, and over-portioning. A good accounting system will provide operational controls to help control these potential loss areas.

Accountants must understand which numbers and ratios are relevant in the food service industry. Managers need financial reports to help them control day-to-day operations. Owners and investors need financial statements to help them evaluate a restaurant's profitability and management. This chapter will discuss in detail the chart of accounts, basis of accounting, and pertinent ratios for restaurants. Financial reports will be studied so that accountants can provide relevant, timely information to their clients.

ACCOUNTING BASICS

BASIS OF ACCOUNTING

A restaurant can select either the cash, accrual, or tax basis of accounting as a means of financial reporting. Because of the simplicity of a restaurant's finances, the operating records are generally kept on a cash basis. The financial statements, however, should be prepared according to the basis most beneficial and cost effective for each restaurant.

The cash basis of accounting is the easiest method for most restaurateurs to comprehend and use. Sole proprietors and relatively small establishments often use this basis of accounting. Cash basis statements provide owners with basic financial information such as total sales, food and beverage costs, and net income. This information is simple to understand, and some restaurant operators find that cash basis statements and a few ratios are all they need to effectively operate their restaurant. Accounting work required by CPAs is minimal, therefore limiting accounting fees.

The tax basis of accounting seems to work well for closely held restaurants whose financial statements are needed only for tax purposes. The tax basis minimizes accounting work since complicated accounting calculations (i.e., the computation of deferred taxes) are not needed. Depreciation is prescribed by tax law, making it a straightforward calculation. Most restaurants will record sales and cost of goods sold on the accrual basis and all other expenses on the cash basis. As a result of such reporting, tax basis statements are probably more informative than cash basis statements in presenting an operation's true financial condition.

The accrual basis is required by generally accepted accounting principles and is recognized by outside parties such as lending institutions. Converting cash basis records to accrual based statements is not a problem for most accountants. Various accounts such as receivables, payables, accruals, and deferrals need to be set up at year-end. This basis of accounting is most appropriate for publicly traded restaurants and, perhaps, franchises that are required to report monthly operating results to franchisors. Also, restaurants seeking financing would be well-advised to prepare accrual based statements.

Accountants should advise clients as to which accounting basis would be most appropriate for their particular operation. Costs and benefits should be carefully weighed for each method before selecting an accounting basis.

13-Period Accounting Year

Most financial statements are prepared on an annual basis. Weekly, monthly, and quarterly reports are needed, however, if management is to regularly evaluate operating results. Most restaurant experts recommend that restaurants use the 13-period, 4-week reporting cycle.

Because dining patterns vary day-by-day (generally with higher sales on weekends than on weekdays), financial statements completed on a monthly basis are not comparable to one another. Months with fewer weekends will not be comparable with months with more weekends.

Instead of reporting on a monthly cycle, restaurants should use 4-week accounting periods. The 4-week, 28-day accounting period enhances financial reporting. To use the 4-week period, the restaurateur must choose a reporting week time period. For example, it might be Monday through Sunday. This ensures that the same number of weekends are in the 4-week comparative statements.

Advantages to the 4-week reporting period include:

- Improved comparability of reports to previous periods and prior years' reports.

- More accurate projections of sales, costs, labor, and inventory levels.

- Weekly reports on such items' sales reports complement a 4-week reporting cycle.
- Improved application of variance analysis and management-by-exception.

The use of 4-week accounting periods also has its disadvantages. They are:

- A new software package might need to be purchased. Not all accounting packages allow for a 13-period year.
- Additional bookkeeping work is required. Sales taxes are filed on a monthly basis. Bank statements are prepared on a monthly basis. Many expenses are charged on a monthly basis to restaurants, for example, rent and utilities. Accountants must convert monthly expenses to 4-week periods.
- Additional costs are incurred due to the additional bookkeeping work and possible software purchase.

In spite of the additional accounting work, the benefits of using the 4-week accounting period seem to outweigh the disadvantages of using monthly periods. It is the reporting period preferred by many experts.

CHART OF ACCOUNTS

The National Restaurant Association (NRA) publishes a book titled the *Uniform System of Accounts for Restaurants.* The primary purpose of the book is to provide consistency in terminology usage and financial statement preparation. Uniformity provides assurance that the users of the financial statements can perform ratio and financial analyses and compare results company to company and to industry averages.

A condensed chart of accounts is in Exhibit 2-1 "Sample Chart of Accounts." For a more detailed chart of accounts, refer to the NRA text. You will note several classifications and account groupings unique to restaurant accounting as you examine Exhibit 2-1. Following are explanations of these accounts.

BALANCE SHEET ACCOUNTS

ASSETS

Accounts Receivable. Accounts receivable should be segregated according to categories: customers, credit card companies, employees, officers, owners, or any other significant classification.

Inventory. A separate account should be kept for each type of inventory. The food inventory includes items on hand in the storeroom, refrigerators, kitchen, freezers, and pantries. The beverage inventory includes items on stock in the bar, storeroom, and wine cellar. The supplies inventory consists of cleaning supplies, stationery, and other miscellaneous items.

Fixed Assets. Fixed assets are long-term and may include accounts for land, building, equipment, furniture and fixtures, and leasehold improvements. One unique account holds the value of linen, china, glass, silverware, utensils, and uniforms. The original investment is kept on the balance sheet and depreciated. Replacements of any of these items (for ordinary breakage) at a later date are expensed currently.

Intangible Assets. Franchise fees are an intangible asset, and should be amortized over the life of the franchise agreement.

LIABILITIES

Deposits. Deposits are from either employees or customers. Some restaurants require employees to put a deposit on uniforms or badges. Customers may also be required to place a deposit for a future banquet or event. In both cases, deposits are a current liability.

Gift Certificates. Gift certificates represent a liability account for outstanding certificates sold. If the certificate is not redeemed by the expiration date, then the certificate should be recorded as other income.

INCOME STATEMENT ACCOUNTS

REVENUES

Sales. Sales are divided into two categories: food and beverages. Food sales include coffee, tea, milk, fruit juices, and soft drinks (if the costs are charged to food costs). Food sales can be further categorized by meal period (breakfast, lunch, or dinner) and/or by location (dining room, carry-out, or banquet). Furthermore, if beverages are served from the bar, then as a convenience, soft drinks are usually included in beverage sales.

Beverage sales include mixed drinks, wine, beer, and soft drinks if served from the bar. Beverage sales might be further categorized by meal period and location.

Cost of Sales. Cost of sales is divided into the corresponding categories: food costs and beverage costs. Food costs include only the cost of food sold to guests and not food consumed by employees. Milk, tea, and coffee (and sometimes soft drinks) are considered part of the meal and are not classified as beverages. The calculation of food costs is beginning inventory plus purchases and freight-in less ending inventory and employee meals.

Beverage costs include the costs of beer, wine, and liquor (and soft drinks if billed at the bar). The beverage cost calculation is beginning inventory plus purchases and freight-in less ending inventory and employee beverages. Accuracy in calculating ending inventory is a problem, due to partially filled bottles. Even though difficult to do, managers should try to calculate the cost of all remaining liquor in the bar area.

Other Income. Sales of items that are not food and beverages will be classified as other income. This includes sales of candy, cigarettes, and novelty items. These items should be shown net of costs. Service and cover charges are also included as other income.

EXPENSES

Controllable Expenses. For external and internal reporting purposes, certain expenses are categorized as controllable in the financial reports. Controllable expenses include those operating expenses that are directly influenced by management decisions and operating policies. Controllable expenses are divided into eight subcategories: salaries and wages, employee benefits, direct operating expenses, music and entertainment, marketing, energy and utility services, administrative and general expenses, and repairs and maintenance.

Detailed descriptions of the types of controllable expenses follow.

Salaries and Wages. This account includes regular salaries and wages plus overtime, vacation pay, and bonuses. Salaries and wages can be further classified according to functional duties:

- *Service*–Servers, greeters, bussers, runners, and expediters.
- *Beverages*–Bartenders and cocktailers.
- *Preparation*–Kitchen manager, chef, prep cooks, and line cooks.
- *Sanitation*–Dishwashers.
- *Purchasing and Storage*–Purchasing steward and receiving clerk.
- *Administrative*–General manager and accounting personnel.
- *Other*–Maintenance staff, door and parking lot attendants.

Employee Benefits. Employee benefits include all payroll taxes, insurance, employee meals, and other benefits. Often restaurants absorb employee meal costs into the food costs account. The NRA does not recommend this practice because it *distorts* food costs. Without corresponding sales income, food costs will be overstated. Thus, employee meals should be recorded as an employee benefit. Also, this enables management to track employee meals as a labor cost.

Direct Operating Costs. Direct operating costs represents the catchall for all operating costs that do not fall into one of the other seven controllable categories. Typical accounts include:

- *Uniforms*–Costs of new uniforms, cleaning, and repairs.
- *Laundry*–Cleaning of table linens, towels, and aprons.
- *Menus*–Costs of art work, paper stock, and printing of menus.
- *Kitchen Fuel*–Gas, electricity, and fuel for cooking.
- *Supplies*–Cleaning, paper (e.g., napkins, cups), guest (e.g., toothpicks, matches), and bar supplies (e.g., mixers, corkscrews, bottle openers).
- *Replacements of Linens, China, Glassware, Silver, and Utensils for Ordinary Breakage*–The original purchase of these items is recorded as an asset and depreciated over its estimated life.
- *Automobile.* Gasoline, oil, licenses, and repairs of restaurant vehicles.

Music and Entertainment. Music and entertainment includes the costs of entertainers, cassettes, CDs, and royalties to composers. For a quick service restaurant, these costs will probably be minimal, whereas a full-service restaurant offering live entertainment would incur higher costs.

Marketing. Marketing expenses are related to increasing public awareness of the restaurant and its products. Typical accounts include selling and promotion, advertising, public relations and publicity, fees and commissions (including franchise advertising fees and royalties), and research.

The cost of advertising will depend on each individual restaurant's perceived need for it. Generally, fast food restaurants invest more money in advertising than full-service restaurants, which tend to invest more resources into music and entertainment.

Energy and Utility Services. This account represents all utility and energy costs with the *exception* of kitchen fuel (which is a direct operating expense). Typical accounts include electricity, water, electric bulbs, fuel, ice, refrigeration supplies, and waste removal. If the landlord pays for the utility bills, then the utility expenses are absorbed into rent expense.

Administrative and General Expenses. These expenses are commonly called overhead since they are tied to the operation of the restaurant rather than to the serving of the customer. The most common accounts include office supplies, postage, telephone, travel, general insurance, merchant charges, professional fees, security, and sales taxes.

Repairs and Maintenance. This account would include painting and decorating expenses, maintenance contracts, as well as repair expenses for equipment. Major improvements that extend the life of an asset or increase its value should be capitalized and depreciated.

Occupancy Costs. Occupancy costs include all costs related to the property usage—real and personal. Rent, property taxes, property insurance, and personal property taxes are all common occupancy accounts.

Interest. The interest account includes interest expense on notes, mortgages, bonds, and all other debt. Interest should be further categorized by type.

Depreciation. Depreciation expense includes depreciation on buildings, furniture, fixtures, and equipment. Amortization of leasehold improvements is also listed in this category.

Corporate Overhead. Since corporate headquarter costs are not controllable by the general manager, corporate overhead is recorded in its own category. Common accounts include management fees and executive office expenses. Often, corporate overhead is allocated to restaurants according to their percentage of total sales.

FINANCIAL STATEMENTS

BALANCE SHEET

The balance sheet for restaurants is similar to those of other industries. The only unusual balance sheet items are inventory accounts segregated by type and the intangible asset of franchise fees. Exhibit 2-2 "Sample Balance Sheet Accounts" lists balance sheet accounts.

INCOME STATEMENT

Exhibit 2-3 "Sample Income Statement" is an example of an income statement for a restaurant. It displays the following categories: sales, cost of sales, gross profit, controllable expenses, occupancy costs, interest, depreciation, and net income.

ANALYZING THE INCOME STATEMENT

The recommended income statement for restaurants is unique to accounting. The following describes several ways the income statement can be used for evaluative and control purposes.

Income Statement Comparisons. Income statement comparisons are easy to do and useful. Year-to-year comparisons (i.e., 12th period, 1999 compared to 12th period, 2000) and period-to-period results (12th period, 1999 to 13th period, 2000) provide important operating information to food service operators. By using the 4-week reporting cycles, results are comparable period-to-period. Amounts that are not comparable will stand out in the reports. Management can investigate these variances and correct problem areas on a timely basis. Most computerized accounting programs will produce comparable reports upon request.

Management Performance Report (or Management Controllable Report). A Management Performance Report can be used to further categorize expenses and highlight variances. Exhibit 2-4 "Sample Management Performance Report" gives an example of this type of report. Notice the emphasis placed on prime costs (direct materials plus direct labor) and controllable profit. This report also displays actual results versus budgeted results and variances. A positive variance occurs when either actual sales are more than budgeted sales or actual costs are less than budgeted costs. A negative variance occurs when the opposite occurs: actual sales are less than budgeted sales or actual costs are more than budgeted costs.

Variance analysis is beneficial since management can take quick direct action to improve performance in areas with negative variances. The Management Performance Report gives restaurant operators the following key financial data.

A. Prime Costs, which are an excellent evaluative tool. Prime costs are equal to food, beverage, and labor costs. In general, prime costs should be reviewed on a weekly basis by all types of restaurants.

B. All cost percentages calculated as a percent of sales, except for food and beverage costs. Food cost percentages are based on *food* costs as a percentage of *food* sales, not total sales. Likewise, beverages cost percentages are based on beverage costs as a percentage of beverage sales, not total sales. (Many food service operators and accountants do not understand this.) An example of how these percentages should be calculated is in Exhibit 2-5 "Sample Calculations for Food and Bar Costs Percentages."

   Note that not all computer programs calculate the cost of sales percentages correctly. It is important for accountants to calculate the percentage correctly so that management can evaluate their food and beverage costs properly. Food costs are evaluated in regard to food sales and beverage costs are evaluated in regard to beverage sales. See Exhibit 2-5 "Sample Calculations for Food and Bar Costs Percentages" for an example of how to calculate the cost of sales percentages correctly.

C. Detail cost of sales report that give further breakdown of food costs into meat, seafood, poultry, dairy, grocery, bakery, and produce. Such an analysis will highlight problem areas. The same type of analysis can be performed on beverage costs. Exhibit 2-6 "Sample Breakdown of Cost of Sales–Food" for an example.

   In examining this Management Performance Report, two problem areas stand out. Sales decreased and grocery costs increased. On the other hand, seafood and poultry costs were lower than the expected costs. Naturally, if sales were less than budgeted, food costs should also be less.

   The reasons for the unfavorable variances for sales and grocery costs cannot be determined from this limited amount of information. Other financial information such as number of meals sold, average customer ticket, and number of customers would be helpful in further analyzing these variances.

Variance analysis can be sophisticated and detailed. Accountants need to be aware of the many factors, financial and non-financial, that might contribute to positive or negative variances. Careful analysis is needed to properly analyze variances and to provide relevant information to clients.

THE STATEMENT OF CASH FLOWS

Exhibit 2-7 "Sample Statement of Cash Flows" is an example of the statement of cash flows. This statement shows how operating, investing, and financing activities affect the cash account from the beginning to the end of the year. Owners often do not understand why they have cash flow problems when net income is positive. This statement gives insight into this predicament.

GUIDELINES FOR BETTER FINANCIAL REPORTING

In conclusion, the following procedures should be considered and implemented when preparing financial reports:

Timeliness. Prepare financial statements on a timely basis. Daily reports should be completed by the following morning and weekly period reports as quickly as possible to provide the most relevant information. Reports received six months later will not help management correct problem areas now. In fact, if a restaurant has a problem area that is not discovered and remedied quickly, restaurant profitability will decrease as a result of the uncontrolled cost.

Investigation. As shown in previous examples of the income statement, all material variances should be investigated immediately. Comparing actual to budgeted results indicates both strong and weak areas. Sophisticated variance analysis may require additional training on an advanced level beyond this introductory course.

Comparisons. Compare financial statement results with previous periods and industry averages as a means to evaluate results. This provides useful, easy-to-follow information.

KEY FINANCIAL RATIOS

Analyzing ratios is an effective way to evaluate restaurant performance both on a short-term and long-term basis. The NRA publishes the ratios for three different types of restaurants on a yearly basis in the *Annual Operations Report.* The ratios include: average check, average daily seat turnover, cost per dollar of sales, annual employee turnover, amount of income per seat, expenses as a ratio to total sales, and cost per seat. Other books publish industry ratios such as the current ratio, debt-to-equity ratio, and days sales uncollected.

Simply stated, ratio analysis has many benefits. By calculating ratios on a regular basis, restaurateurs will be able to:

- Gain a more thorough understanding of their business enterprises.
- Identify problem areas quickly and on a timely basis.
- Identify strong points to capitalize on.

Exhibit 2-8 "Summary of Ratios" has a list of ratios that might be calculated on a weekly, monthly, and annual basis. Brief descriptions are given to describe each ratio. Accountants must decide which ratios are most relevant to their clients. Following are several key ratios that can be calculated regularly to aid the restaurant operator in evaluating sales and controlling costs.

Evaluating Sales:

- Customers served per day
- Average check per customer = $\dfrac{\text{Total sales}}{\text{Number of customers}}$

These ratios give general information about daily sales. Management can keep track of upward or downward sales trends by calculating these ratios.

Controlling Costs:

- Food cost percentage = $\dfrac{\text{Food Costs}}{\text{Food Sales}}$
- Beverage cost percentage = $\dfrac{\text{Beverage Costs}}{\text{Beverage Sales}}$
- Labor cost percentage = $\dfrac{\text{Total wages \& benefits}}{\text{Total sales}}$
- Prime cost percentages = $\dfrac{\text{Prime costs}}{\text{Total sales}}$

Management can track cost percentages on a daily or weekly basis. Management should compare daily and weekly results to yearly averages. Material variances from the average ratios should be further investigated.

The following are recommendations about ratio analysis:

- Determine your client needs. Providing innumerable ratios is overwhelming for a client. An accountant must target the pertinent ratios, calculate them, and explain their meanings to the restaurant owner. Otherwise, the ratios will be meaningless to the restaurant operator.

- Data needs to be gathered beyond the initial financial statement data. For example, number of customers, number of labor hours, etc. are needed to calculate some pertinent industry ratios. Clients need an extended data base to keep track of their non-financial information.

- Be wary of rules-of-thumb. Each restaurant must be evaluated with its own individual financial situation in mind. Rules-of-thumb have their place in financial analysis, but should not dominate the analysis.

- Ratios should be compared period-to-period and to industry standards.

Do not jump to conclusions in ratio analysis (or variance analysis). Unusual comparisons may simply be due to an accounting error or employee mistake. For example, an employee might count inventory incorrectly. Caution needs to be taken when performing financial analysis.

SUMMARY

- Depending on a restaurant's specific needs, cash, tax, and accrual are all acceptable accounting basis choices.

- The 13-period accounting year is recommended for restaurant use. It allows for better comparability of reports and more accurate projections of sales, costs, and inventory levels.

- The chart of accounts for a restaurant is large and varied. Restaurant operators should not feel obligated to use all the accounts recommended by the NRA. A streamlined chart of accounts may be more meaningful for evaluation purposes for some restaurants.

- The income statement presents several accounts unique to restaurant accounting such as food sales, beverage sales, food costs, beverage costs, controllable expenses, net income before occupancy costs, occupancy costs, and corporate overhead.

- The "Management Performance Report" presents information so that key financial information is highlighted. Actual results are compared to budgeted results with their related variances. Accountants must take care to ensure that they calculate food and beverage costs correctly to provide restaurateurs with relevant cost information.

- Key financial ratios should be calculated on a regular basis. Ratio analysis gives restaurant owners an improved understanding of their business and identifies a restaurant's strengths and weaknesses.

EXHIBIT 2-1

SAMPLE CHART OF ACCOUNTS

BALANCE SHEET ACCOUNTS

ASSETS

Cash in bank
Cash on hand
Accounts receivable
Inventory–food
Inventory–beverages
Inventory–supplies
Prepaid expenses
Fixed assets
Linens, china, glass, silver, utensils, uniforms
Accumulated depreciation

LIABILITIES

Accounts payable
Payroll taxes withheld
Deposits
Gift certificates
Accrued expenses
Notes payable

STOCKHOLDERS' EQUITY

Common stock
Paid in capital
Retained Earnings

INCOME STATEMENT ACCOUNTS

REVENUES

Sales–food
Sales–beverages

COST OF SALES

Cost of sales–food
Cost of sales–beverages

OTHER INCOME

Cover charges and minimums
Concessions

CONTROLLABLE EXPENSES

Salaries and wages
Employee benefits
Direct operating expenses
Music and entertainment
Marketing
Utilities
Administrative and general expenses
Repairs and maintenance

OCCUPANCY
INTEREST
DEPRECIATION

CORPORATE OVERHEAD

EXHIBIT 2-2

SAMPLE BALANCE SHEET ACCOUNTS

ASSETS

Current Assets:
- Cash
- Accounts receivable
- Inventory–food
- Inventory–beverages
- Prepaid expenses

Total Current Assets

Investments

Property and Equipment:
- Land
- Machinery & equipment
- Furniture
- Leasehold improvements
- Less: accumulated depreciation

Intangibles:
- Organizational fees
- Franchise fees

Total Assets

LIABILITIES & STOCKHOLDERS' EQUITY

Current Liabilities:

Accounts payable
- Sales taxes payable
- Payroll taxes withheld
- Accrued liabilities
- Provision for income taxes
- Gift certificates

Total Current Liabilities

Long-term Liabilities

Stockholders' Equity
- Capital stock
- Paid in capital
- Retained earnings

Total Liabilities & Equity

EXHIBIT 2-3

SAMPLE INCOME STATEMENT

	ACTUAL		BUDGET		VARIANCES Favorable (Unfavorable)
SALES					
Food	$120,000	80.0%	$125,000	85.0%	$(5,000)
Beverages	30,000	20.0%	22,000	15.0%	8,000
TOTAL SALES	$150,000	100.0%	$147,000	100.0%	3,000
COST OF SALES					
Food	$ 51,300	42.8%	$ 51,600	41.3%	$ 300
Beverages	8,700	29.0%	5,500	25.0%	(3,200)
TOTAL COSTS	60,000	40.0%	$ 57,100	38.8%	(2,900)
GROSS PROFIT	90,000	60.0%	$ 89,900	61.2%	100
CONTROLLABLE EXPENSES					
Payroll	$29,000	19.3%	$29,000	19.7%	0
Employee benefits	4,000	2.7%	4,000	2.7%	0
Direct operating expenses	4,300	2.9%	4,000	2.7%	(300)
Music & entertainment	1,800	1.2%	2,000	1.4%	200
Marketing	2,200	1.5%	1,800	1.2%	(400)
Energy	3,400	2.3%	3,200	2.2%	(200)
Administrative & general	4,400	2.9%	4,600	3.1%	200
Repairs & maintenance	1,800	1.2%	1,000	.7%	(800)
TOTAL CONTROLLABLE	50,900	33.9%	49,600	33.7%	(1,300)
INCOME BEFORE OCCUPANCY COSTS	$ 39,100	26.1%	$40,300	27.4%	$ (1,200)
OCCUPANCY COSTS					
Rent	$ 10,000	6.7%	$ 10,000	6.8%	0
Personal property taxes	1,000	.7%	1,000	.7%	0
TOTAL OCCUPANCY	$ 11,000	7.4%	$ 11,000	7.5%	0
INCOME BEFORE INTEREST & DEP'N	$ 28,100	18.7%	$ 29,300	19.9%	$(1,200)
Interest	5,000	3.3%	5,000	3.4%	0
Depreciation	10,000	6.6%	10,000	6.8%	0
NET INCOME BEFORE TAXES	$ 13,100	8.7%	$ 14,300	9.7%	$ (1,200)

EXHIBIT 2-4

SAMPLE MANAGEMENT PERFORMANCE REPORT

	ACTUAL		BUDGET		VARIANCE Favorable (Unfavorable)
SALES					
Food	$120,000	80.0%	$125,000	85.0%	$(5,000)
Beverages	30,000	20.0%	22,000	15.0%	8,000
TOTAL SALES	$150,000	100.0%	$147,000	100.0%	3,000
COST OF SALES					
Food	$40,000	33.3%	$42,100	33.7%	$2,100
Beverages	20,000	66.7%	15,000	68.2%	(5,000)
TOTAL COSTS	$60,000	40.0%	$57,100	38.8%	(2,900)
GROSS PROFIT	$90,000	60.0%	$89,900	61.2%	100
CONTROLLABLE EXPENSES					
Payroll	$29,000	19.3%	$29,000	19.7%	0
Employee Benefits	4,000	2.7%	4,000	2.7%	0
PRIME COSTS	93,000	62.0%	$90,100	61.3%	2,900
Direct Operating Expenses	4,300	2.9%	4,000	2.7%	(300)
Music & Entertainment	1,800	1.2%	2,000	1.4%	200
Marketing	2,200	1.5%	1,800	1.2%	(400)
Energy	3,400	2.3%	3,200	2.2%	(200)
Administrative & General	4,400	2.9%	4,600	3.1%	200
Repairs & Maintenance	1,800	1.2%	1,000	.7%	(800)
CONTROLLABLE PROFIT	$39,100	26.1%	$40,300	27.4%	(1,200)

EXHIBIT 2-5

SAMPLE CALCULATIONS FOR FOOD AND BAR COSTS PERCENTAGES

	CORRECT %s		INCORRECT %s	
SALES				
Food	$ 120,000	80.0%	$ 120,000	80.0%
Beverages	30,000	20.0%	30,000	20.0%
TOTAL SALES	$ 150,000	100.0%	$ 150,000	100.0%
COST OF SALES				
Food	$ 40,000	**33.3%**	$ 40,000	**26.7%**
Beverages	20,000	**66.7%**	20,000	**13.3%**
TOTAL COSTS	$ 60,000	40.0%	$ 60,000	40.0 %

Evaluate food costs in regards to food sales, not total sales, and beverage costs in regards to beverage sales, not total sales.

(a) Correct formulas
Food costs = $40,000/$120,000 = 33.3%
Beverage costs = $20,000/30,000 = 66.7%

(b) Incorrect formulas
Food costs = $40,000/$150,000 = 26.7%
Beverage costs = $20,000/$150,000 = 13.3%

EXHIBIT 2-6

SAMPLE BREAKDOWN OF COSTS OF SALES–FOOD

	ACTUAL		BUDGET		VARIANCE Favorable (Unfavorable)
Sales–Food	$100,000	100.0%	$105,000	100.0%	($5,000)
Cost of Sales:					
Meat	$ 5,000	5.0%	$ 5,000	4.8%	0
Seafood	15,000	15.0%	17,200	16.4%	2,200
Poultry	10,000	10.0%	11,000	10.5%	1,000
Grocery	10,000	10.0%	9,000	8.5%	(1,000)
Cost of Sales–Food	$ 40,000	40.0%	$42,200	40.1%	$ 2,200

EXHIBIT 2-7

STATEMENT OF CASH FLOWS

Cash flows from operating activities:		
Net Income		$ xx
Add (deduct) items not affecting cash		
Depreciation expense	$ xx	
Gains on sales of equipment	(xx)	
Increase in accounts receivable	(x)	
Increase in accounts payable	x	
Net cash flow from operating activities		$ xx
Cash flows from investing activities:		
Proceeds from sale of equipment	$ xx	
Purchase of equipment	(xx)	
Net cash flows provided by (used in) investing activities		xx
Cash flows from financing activities:		
Payment on mortgage	$(xx)	
Loan from bank	xx	
Dividends paid	(xx)	
Net cash flows provided by (used in) financing activities		(xx)
NET INCREASE (DECREASE) IN CASH		$ xx
CASH, BEGINNING OF PERIOD		xx
CASH, END OF PERIOD		$ xx

EXHIBIT 2-8

SUMMARY OF RATIOS

WEEKLY RATIOS

Profitability
Gross profit margin
Profit margin

Controlling Costs
Food cost as a % of food sales
Beverage cost as a % of beverage sales
Labor cost as a % of total sales
Prime cost %

Sales Efficiency
Average check per customer

MONTHLY RATIOS

Inventory Control
Days sales in food inventory
Days sales in beverage inventory

Labor Productivity
Sales per direct labor hour

Performance Ratios
Labor cost per guest served
Food cost per guest served
Sales per seat
Dining seat turnover

OTHER RATIOS

Miscellaneous
Current ratio
Payback period
Debt to equity

Weekly Ratios

(1) Concerning Profitability:

- Gross profit margin = $\dfrac{\text{Gross profit}}{\text{Sales}}$

- Profit margin = $\dfrac{\text{Net income}}{\text{Sales}}$

Profitability can be compared to prior periods and projections to see if it is in line with expected results. The average profit margin is low, as discussed in Chapter 1, ranging from 4-8%, depending on the type of restaurant.

(2) Concerning Control of Costs:

- Food cost percentage = $\dfrac{\text{Food costs}}{\text{Food sales}}$

Food costs may run from 28% for quick service and 38% for full-service restaurants.

- Beverage cost percentage = $\dfrac{\text{Beverage costs}}{\text{Beverage sales}}$

Depending on the type of beverage, the cost % varies. Draft beer has a lower % ranging 15–18%, bottled beer is at 24–28%, and wine runs 35–45%.

- Labor cost percentage = $\dfrac{\text{Total wages \& benefits}}{\text{Total sales}}$

Again the percentage varies with the type of restaurant. Full service can be as high as 35% and fast-food as low as 25%.

- Prime cost percentage = $\dfrac{\text{Prime costs}}{\text{Total sales}}$

For quick service, prime costs run about 50%, and for full-service, prime costs run between 60–70%.

(3) Sales Efficiency

- Average check per customer = $\dfrac{\text{Total sales}}{\text{Number of customers}}$

This ratio should be compared to industry average for type of restaurant and to prior weeks' ratio. If the average check decreases, it could be due to poor service and/or the lack of upselling by servers.

MONTHLY RATIOS

(1) Inventory Control Ratios:

- Days sales in food inventory = $\dfrac{\text{Ending inventory–food}}{\text{Average daily cost of sales–food (Cost of sales/Number of days in period)}}$

- Days sales in beverage inventory = $\dfrac{\text{Ending inventory–beverages}}{\text{Average daily cost of sales–beverage (Cost of sales/Number of days in period)}}$

These ratios measure a restaurant's ability to utilize its inventory. Days in food inventory is about 3-5 days for fast-food restaurants and 6-7 for full service. If the days sales is too high, that could mean the restaurant could be carrying too much stock and might experience spoilage. Days in beverage inventory is longer, ranging from 20-30 days on average.

(2) Labor Productivity Ratios:

- Employee turnover rate = $\dfrac{\text{\# of employees that leave the workforce}}{\text{\# of employees in current workforce}}$

The most widely used productivity ratio, averaging 117–140%.

- Productivity ratio = $\dfrac{\text{\# of guests served}}{\text{\# of servers}}$

This productivity ratio evaluates the number of guests helped per server. Additional productivity ratios will be discussed in Chapter 6.

(3) Performance Ratios:

- Labor per guest served = $\dfrac{\text{Cost of labor}}{\text{Guests served}}$

This ratio will give you the amount of labor that went into each check. For example, a $3 labor per meal served ratio can be compared to a $14 average check as a means to evaluate labor productivity and menu pricing.

- Food cost per guest served = $\dfrac{\text{Cost of sales of food}}{\text{Guests served}}$

Used in conjunction with the labor cost per meal served ratio, the restaurant manager will have a good idea of profitability per guest check.

- Sales per seat = $\dfrac{\text{Total sales}}{\text{Number of dining seats}}$ or per square foot = $\dfrac{\text{Total sales}}{\text{Total square feet}}$

Either ratio gives a measure of sales efficiency. This ratio helps managers evaluate whether or not their facilities are being utilized effectively.

- Dining seat turnover = $\dfrac{\text{Number of customers}}{\text{Number of dining seats}}$

The average for this ratio is 1.3 times for full-service restaurants and 4.5 times for fast food. Obviously, customers do not spend much time dining in fast-food restaurants.

OTHER RATIOS

- Current ratio = $\dfrac{\text{Current assets}}{\text{Current liabilities}}$

Lenders tend to look at this ratio as a sign of liquidity. The higher the ratio, the more liquid the company. Another common liquidity ratio is the Quick Ratio (Cash + Accounts receivables + Marketable securities/Current liabilities). This ratio excludes inventories and prepaid expenses which cannot be readily converted to cash to pay bills.

- Payback period = $\dfrac{\text{Purchase price of restaurant (or asset)}}{\text{Annual net cash flow}}$

This ratio evaluates a proposed investment. The lower the payback period the faster an owner will retrieve his or her initial investment.

- Debt to equity = $\dfrac{\text{Total liabilities}}{\text{Total equity}}$

This ratio measures the extent of the financing of the company from either debtors or shareholders.

These ratios are recommended for use for the following reasons:

- With profit margins averaging only 4–8%, management must keep a close watch over costs. If costs get out of control, profitability will decrease dramatically. Weekly ratios are intended to provide quick, current cost control information. For example, if food costs are out of line, it will show up in a ratio.

- Monthly ratios highlight other business aspects of the restaurant including inventory control, labor productivity, and performance. Ratios should be compared to prior periods and industry standards. Corrections to problem areas mean increased bottom line profits.

- Other ratios highlight liquidity and payback periods, which are of interest to lenders and investors.

CHAPTER 3

SALES ANALYSIS AND REPORTING

INTRODUCTION

Recording sales is simplified with the use of electronic cash registers (ECRs) and computerized point-of-sales (POS) systems. Both ECRs and POS systems can group sales by type as well as distinguish taxable from non-taxable sales. A computerized POS system gives restaurant operators detailed information that may include number of customers served, sales type, table turnover rates, server sales, credit card tips, cash and credit card sales, and financial reports.

ECRs are stand-alone systems that are less sophisticated than POS systems. POS systems, although more expensive, provide higher levels of control. Many independent restaurants may not be able to afford a POS system. In these cases, the ECRs may prove cost effective to record sales. Large volume restaurants and chains often use POS systems to track sales. Experts state that a good POS system increases operational efficiency and pays for itself in savings over a short period of time.

Many restaurants also use POS systems as part of a fully integrated computer package. POS systems may include software modules for timekeeping, table management, inventory control, and bank processing of credit card charges, to name a few. The output of POS systems is multifaceted and may include menu production, scheduling, forecasting, payroll processing, and inhouse accounting. A restaurant's budget and need for controls will determine what type and how complex a system to acquire.

A restaurant must keep tight controls over sales regardless of the type of system it uses. Effective sales and menu analysis affect restaurant profitability. This chapter explains sales management, controls, and POS systems.

SALES REPORTING

When a customer orders a meal, the server records the meal on a guest check. Next the server either takes the check to the kitchen or records it on a POS terminal. The following section describes how paper-based systems and the POS systems operate.

PAPER-BASED SYSTEMS

In smaller restaurants, paper guest checks are often used to record meals. A typical guest check will have a place on it to record the server name, table number, number of guests, and date. The checks may be in singular, duplicate, or triplicate formats.

A server records the order on the paper guest check, and if a two-part guest check is used, one copy of the ticket goes to the kitchen. The chef prepares the meal from that ticket and forwards the ticket to the back-office for reconciliation purposes. After the end of the meal, the guest check is left with the customer. The original check is retained by the cashier after the meal is settled.

A restaurant will select one of the following ways to settle the guest check.

- *Cashier-banked:* customers pay either (1) the cashier upon leaving the restaurant, or (2) the server, who in turn, takes the money or credit card to the cashier.

- *Server-banked:* customers pay a server at the table where the server makes change for the customers. "Self-banking" means that servers give the change to the customers, and retain all monies and credit card receipts collected until the end of their shift. At the end of the shift, the servers "cash out." The cashier adds up the server's sales, and the servers pay the cashier for the amounts due for the meals. (Under POS systems, the cashier will print a summary of the server's meals at "cash out.")

After settlement, the customer can take the guest check stub as a receipt for the meal. An example of a paper-based check with a stub is in Exhibit 3-1 "Sample Guest Check With Stub."

All checks should be prenumbered, and a record of the guest ticket numbers given to servers should be kept. At the end of a shift, servers must account for all guest checks and provide explanations for any missing checks. Missing checks may include voids and must be traced in order to avoid fraud.

Under a two-part system, guest checks are given to a cashier for reconciliation with those from the kitchen to ensure that all meals have been accounted for and paid for by customers. If there is a discrepancy, further investigation should take place. Perhaps the customer left without paying the bill, or perhaps the server did not turn in the guest check and kept the money collected. This is an important sales control function to ensure that all sales are recorded and cash collected.

Under a one-part system, guest checks should be reconciled to monies collected in the cash register. It is important that all guest checks given to servers are accounted for and payment is collected for each check. The difficulty with the one-part system is that reconciliation of all food items leaving the kitchen cannot be performed because there is no duplicate copy of the check left in the kitchen. This added control is the reason that two-part guest check systems are recommended over single check systems.

POS SYSTEMS

If a POS system is used, servers must record meals on guest checks. Rather than give written information to the kitchen, servers enter the orders into the POS terminal. Terminal keys usually have names of the food items on them; some systems use touch screens. Once orders are entered, the terminal records each item, price, and computes sales tax. The server also enters in the table number, the number of guests served, and meal and preparation directions. The ticket remains open until the meal is over and add ons like dessert items can be recorded.

The meal order is transmitted to a remote printer in the kitchen. The kitchen personnel prepare the meal according to the instructions. After customers finish dining, the server closes the guest ticket and delivers it to the customers.

In some restaurants, customers pay a cashier upon exiting. In other restaurants, customers pay the servers who turn in the money to a cashier. Some restaurants require servers to turn in the monies immediately, while other restaurants have servers turn in the money at the end of their shifts (known as server-banked). In the latter case, the POS terminal will print out a summary for each server showing amounts due the cashier. The server must pay the cashier for the meals recorded on the guest checks. The difference between the amount paid to the cashier and the amounts collected from customers is the server's tips. Occasionally, the amount of cash may be short or over due to walk-outs and math mistakes in making change for customers. Servers need to track tips and balance at the conclusion of their shifts.

POS systems will be described in detail later in this chapter as well as their relationship to an integrated accounting system.

ACCOUNTING FOR DAILY SALES AND CASH CONTROLS

The Role of the Cashier. The manager issues a cash drawer to the cashier. The cash drawer contains a report itemizing the currency contained. Cashiers and managers should be the only personnel allowed to operate the drawers. Whenever servers or customers present guest checks to cashiers, the cashier should examine each ticket (if paper-based) to ensure that all items are charged for and at the correct price, sales tax is calculated correctly, and the bill is totaled correctly. In some restaurants, the cashier is also responsible for filling out charge card forms

At the end of each shift, the cashier must balance the daily receipts with the manager.

A POS system will list all the cash and charge sales made during the shift. If the system is an electronic cash register, the cashier manually fills out a report. Exhibit 3-2 "Sample Cashier's Report" is an example of a cashier's report. Sales by category, complimentary meals, discounts, voids, and cash-payouts are listed on a summary sheet. A cash payout occurs when cash is taken out of the drawer during a shift to pay an expense. One example of a cash payout is paying a supplier in cash for a delivery. The amount is paid out of the cash drawer, and a receipt of the payment is left in the drawer to support the expenditure.

Cashiers are accountable for the cash handled during their shifts. During a shift, the cashier must make sure the cash drawer is closed after every sale. If the cash register is unattended, the keys to operate the register should be removed by the cashier. Cashiers should not be allowed to have purses or bags near the register during their shifts to prevent theft.

The Role of Management. When cashiers clear their registers, a manager needs to ensure that the cash drawer reconciles to the cashier's report. For example, all cash and credit card receipts in the drawer less cash payouts should equal the total amounts recorded on the guest checks. When everything is balanced, the manager and cashier sign the cashier's report. The cash, charge slips, guest tickets, cash payout records, and register tapes are given to the bookkeeper for further accounting and reconciliation work if an ECR is used. A POS system automatically tracks this information.

Other controls instituted by the manager might include surprise cash counts during a cashier's shift to ensure the cashier is recording items properly. Also, the manager should select a sample of guest checks and compare it to the cash register tapes periodically. All cash collected should be deposited in the bank no later than the next business day. Monies collected should be retained in the company safe overnight.

The Role of the Bartender. Many restaurants assign cash drawers to bartenders. Occasionally all bartenders share one cash drawer during a shift. Usually bartenders are assigned their own cash drawers. Bartenders are required to follow the same procedures as cashiers concerning the operation of cash drawers.

Controlling Coupons, Complimentary Food and Drinks, and Walk-Outs. Tracking coupons, discounts, and complimentary items is another management duty. Dishonest servers may collect full price for a meal, and, after the fact, attach a coupon to the guest check and pocket the cash difference. To avoid this, some restaurants require management approval of coupons, and others ask that guests record their name, address, and phone number on the coupon. In the latter case, managers can spot check the coupons to ensure that they are legitimate.

Managers may also have an idea of what the normal range of coupons to be collected by a server within a given time frame should be. If a server turns in an abnormally high number of coupons, the manager may further verify the legitimacy of the coupons.

Complimentary food and drinks are often given to disgruntled diners if an order is not handled properly. Perhaps the order took too long to prepare, or there was a problem with the food quality. A good control is to limit complimentary meal authorization to managers only.

Complimentary food and drinks (comps) should be tracked as a discounted item. The reasons for the comps should be listed as they occur. A high number of comps could mean that there are problems with either the service or kitchen or both.

Customer walk-outs may be a problem. A walk-out occurs when a customer leaves the restaurant without paying. Restaurants absorb the costs of walk-outs, but should track them by server. If a server has a high number of walk-outs, a server might be claiming bogus walk-outs and keeping the cash. To minimize walk-outs, the cashier's station should be located near the exit.

Daily Reporting Requirements. Managers can print on demand a summary of sales on an x-tape to check basic daily sales information. The x-tape is the subtotal of daily sales with a summary of meals served, sales dollars, and number of guests served. The final run of the tape at the end of the day is called the z-tape. The running of the z-tape clears the system's totals for that day and readies the ECR or POS for the next business day. Exhibit 3-3 "Sample Z-Tape" is an example of a typical z-tape.

At the end of the day, the information from the z-tape is transferred to a daily sales summary sheet either by hand or by the computer. Appearance of the sales summary sheet varies from restaurant to restaurant. Exhibit 3-4 "Sample Daily Sales Report" is a typical example of a daily sales summary sheet. The information for the daily report is recorded in the general ledger. Sales tax must be separated from sales so that the proper liability is calculated.

POS PRIMER[1]

A POS system provides the following benefits. These benefits become apparent as the POS system is described in detail in the following sections. The POS system:

- Reduces server errors;
- Automatically totals revenues;
- Automatically calculates sales taxes;
- Ensures that all sales are recorded;
- Computes menu item sales by department;
- Tracks server sales;
- Identifies sales by type, time period, and dining area;

[1]The Point-of-Sale System used as a model (including sample print-outs and displays) in this chapter was developed by Sable Technologies Inc., 21216 Cabot Boulevard, Hayward, CA 94545 (800/722-5390).

- Tracks complimentary meals, discounts, voids, coupons, and employee meals;
- Tracks the "86 count" meaning a menu item is low or out;
- Provides "on demand" management reports;
- Decreases paperwork; and
- Increases table turnover.

There are many more features to a POS system. POS systems can also be industry specific, for example, specifically designed for quick service restaurants. Furthermore, POS systems either use keyboard technology or touchscreen technology. Touchscreen technology is becoming the most popular technology because of its ease of use. Servers can learn how to use the system in a matter of a few hours. The POS system described in this chapter is a touchscreen system based in a full-service restaurant. The company that designs this system estimates that it takes four hours for a server to become proficient in using their system. Other systems may work differently.

FRONT-HOUSE FEATURES

The front-house features of a POS system automate all of the activities performed by restaurant personnel. These activities include selecting a table, keeping a bar tab, ordering menu items, sending preparation instructions to the kitchen, reviewing the guest checks, and authorizing credit cards for payment.

Clock In. Before beginning a shift, a server or bartender should "clock in." Some POS systems include a timekeeping device. The server or bartender either swipes an ID card or punches in an identification code manually. The ID card system is considered more secure since employees sometimes learn the ID codes of other servers under the manual system and misuse them. If an ID card is lost, another card can be issued in a matter of seconds by a manager, and the old card is automatically voided. Each server or bartender's card is secured by a cord to prevent misuse by other servers. The card-based system will be used in the following description of a POS system.

Taking the Order. When guests are seated, servers enter their ID numbers or swipe their cards. A display similar to the following example in Figure 3-1 "Sample Table Selection Screen" may appear on the monitor.

Figure 3-1
Sample Table Selection Screen

Uncle Dan's Restaurant Table Selection	
101	201
102	202
103	203
104	204
105	205

The server enters the table number where the guests are seated. The system asks for the number of guests. After the number is entered, a menu appears. The system can be programmed to automatically show the lunch menu during the afternoon hours, and the dinner menu during supper hours. Figure 3-2 "Sample Lunch Menu Screen" is an example of a menu screen.

Figure 3-2
Sample Lunch Menu Screen

Uncle Dan's Restaurant Lunch Menu	
Categories:	
Beverages	Entrees
Bar	Sides
Appetizers	Desserts
Quick Pix:	
Triple Decker	Chicken Salad
Corned Beef	Philly Cheese
Tuna Salad	Hamburger

The server indicates the menu items that the guests order. The server can also designate the order by seat number. Each category listed on the Lunch Menu Screen–Beverages, Bar, Appetizers, Entrees, Sides, and Desserts has a *submenu.* The "Quick Pix" items is a list of commonly ordered items, usually the entrees, that the server can order quickly without going into a submenu. Some POS systems may not have the "Quick Pix" feature.

If a server selects a "Quick Pix" item, the order goes immediately to the kitchen. To order beverages, however, the server must go to a submenu. Figure 3-3 "Sample Beverage Submenu Screen" is an example of the beverage submenu. The server selects the beverage items ordered. If the item is a beverage prepared at the bar, a remote printer at the bar prints out the item, and the bartender prepares it. Non-bar items, such as coffee, are prepared by the server and taken to the customer.

Figure 3-3
Sample Beverage Submenu Screen

Uncle Dan's Restaurant Beverages	
Coffee	Decaf
Tea	Milk
Soft Drink	Iced Tea

For main entree items, modifier submenus may appear. For example, if a hamburger is ordered, hamburger "modifiers" appear. Common hamburger "modifiers" would include cooking instructions–well done, medium, and rare, and condiments–lettuce, tomato, mayo, mustard, ketchup, pickle, and onion. Figure 3-4 "Sample Modifiers for Hamburger" is an example of a modifier screen.

Figure 3-4
Sample Modifiers for Hamburger

Uncle Dan's Restaurant
Modifiers

Select One or Two:

Well	Medium
Rare	

Select as many that apply:

Lettuce	Tomato
Mayo	Mustard
Ketchup	Pickle
Onion	

After the meal selections are entered, remote printers located in the bar and kitchen areas print out the order.

Sample Orders and Remote Print-Outs. This is a sample order punched into the POS terminal:

1 Miller Lite (Seat 1)
1 Glass of Rose Wine (Seat 2)
1 Hamburger, medium well with lettuce and onion (Seat 2)
1 Coke (Seat 1)
1 Corned Beef Sandwich (Seat 1)
1 Piece of Cheesecake (Seat 2)

The following print-outs as shown in Figure 3-5 "Sample Remote Print-outs" will appear at the remote terminal printers:

Figure 3-5
Sample Remote Print-outs

BAR REMOTE

Check #2005
Time 11:43AM
Date 11-10-XX
Guests 2
Server 11

TABLE106

Miller Lite > S 1
GL Rose > S2

Print-out #1
Remote Bar

HOT REMOTE

Check #2005
Time 11:43AM
Date 11-10-XX
Guests 2
Server 11

TABLE 106

Corned Beef > S 1
Hamburger > S2
Medium Well
Lettuce
Onion

Print-out #2
Remote Kitchen Hot

COLD REMOTE
Remote Kitchen Hot

Check #2005
Time 11:43AM
Date 11-10-XX
Guests 2
Server 11

TABLE 106

Cheesecake > S 1

Print-out #3
Remote Kitchen Cold

Table numbers and modifiers are printed in red letters so that they stand out. A server or server assistant can easily spot the table number on the ticket and take the meal or beverage item to the table once it is prepared. Also, modifiers are printed in red letters so that kitchen personnel can easily see them for preparation purposes.

Only drinks to be prepared at the bar are printed out on the "remote bar print-out" (Print-out #1). Items such as soft drinks that are prepared by the servers do not appear on the bar printout.

Hot food items that are cooked are printed on a terminal which is located near the cooking area. "Cold" items or items that are not cooked, such as salads and desserts, may be printed out on a terminal which is located near the cold food preparation stations.

The table number is on the tickets along with the seat numbers so that the food can be taken to the right guests by the servers. On Print-out #2, S1 stands for Seat 1 and S2 stands for Seat 2.

Settlement of the Check. The server prints out the guest check when the customer is ready to leave. The server selects the "pay" button on the keyboard, and the customer's check appears on the screen. The server can review the check for errors or omissions, and then print the check out. The server, at this time, can also split the check if the customers desire separate checks. Figure 3-6 "Sample Guest Check" is an example of a check.

Figure 3-6
Sample Guest Check

Uncle Dan's Restaurant

Check #2011-1	Table #106
Date: 11-10-XX	Time: 11: 35AM
Guests: 2	TCP: 12:35PM
1 Miller Lite	2.25
1 Glass Rose	4.00
1 Coke	1.25
1 Corn Beef	4.25
1 Hamburger	4.25
1 Cheesecake	3.00
	SUBTOTAL 18.75
	TAX 1.08

DUE 19.83

Thank you!
Server 11

The server picks up the guest check and the payment, which may be cash, check, or credit card. If the payment is by credit card, the server swipes the card in the POS terminal, and a charge slip prints out after credit approval. The server takes the credit card authorization form to the table, and the guests sign one copy, and keep the second copy as their receipt. See Figure 3-7 "Sample Credit Card Authorization Form" for an example.

Figure 3-7
Sample Credit Card Authorization Form

Uncle Dan's Restaurant
700 W Main Street
Columbus, OH 43215

Server 11
Check #2011–1 Table #106
Date: 11-10-XX Time: 12:40PM

Cardmember:	Jane Smith
AMEX:	2345678910
Exp:	08/XX
AUTH:	123467

Purchases	$ 19.83
Tip	$
Total	$

SIGNATURE___________________

(I agree to comply with the cardholder agreement)
1st copy: Merchant 2nd: Customer

When tips are added to the credit authorization forms, they must be input into the terminal. The server will input the tip, and print out a final guest check and give it to the customer. See Figure 3-8 "Sample Final Guest Check" for an example. The server will also retain a copy of the final check and attach it to the authorized credit card receipt. The transaction is now completed, and the table is ready for a new guest or guests once it is cleared and set.

On some systems, the final guest check is designated as Check #A2011. The letter "A" symbolizes that this is a second print-out of the check. The original check did not have a tip recorded on it. If another copy of the check is needed, it is numbered #B2011.

The time in which the guest entered the restaurant and settled the bill is also printed on each check. These numbers can be used for financial analysis purposes such as for calculating the table turnover rates.

The terminal also tracks all items sold at the restaurant by day or by a time period, and also by server. These reports are management control features of a POS system.

Figure 3-8
Sample Final Guest Check

Uncle Dan's Restaurant	
Check #A2011-1	Table #106
Date: 11-10-XX	Time: 11:35AM
Guests: 2	TCP: 12:40PM
1 Miller Lite	2.25
1 Glass Rose	4.00
1 Coke	1.25
1 Corn Beef	4.25
1 Hamburger	4.25
1 Cheesecake	3.00
SUBTOTAL	18.75
TAX	1.08
DUE 19.83	
******Payment Tendered******	
Sales	19.83
Chrg'd Tip	3.00
12:40 AMEX	22.83
2345678910	
Thank you!	
Server 11	

MANAGEMENT CONTROL FEATURES

Management must also use identification cards or passwords to gain access to the POS terminals. The levels of management control versus server control is set on the main computer located in the back office. All of the POS terminals are networked to the back office PC. Controls set in the POS software determine the authorization levels for servers and management.

Limited Authorization. Authorization for certain operations is limited to managers. For example, in many restaurants all discounts and complimentary meals or drinks must be approved by a manager. If this were not the case, servers could give unauthorized discounts to friends (e.g., giving them a 10% senior discount) or complimentary drinks, perhaps in hopes of a larger tip.

POS terminals may restrict authorization in granting of discounts and complimentary items, and voids to management. This control prevents servers from collecting money from customers, voiding the transaction, and keeping the money for themselves.

Only managers should authorize service charges. Service charges consist of an amount, usually 15%, that is added to a check in lieu of a tip. Large parties are often charged service charges to ensure that servers receive fair compensation for their work. Dishonest servers, however, may charge service charges on a regular guest check. The customer might not notice the charge, and unknowingly add a tip to the check. The server then earns a double tip (the service charge plus tip). Therefore, to protect the customers, management should have to authorize service charges.

A manager of a full-service restaurant recently stated, "If there's a way for servers to cheat you, they will figure it out and do it." Therefore, utilizing management control features inherent in a POS system are of the utmost importance.

Other Operations

A manager can also transfer tables from server to server, or transfer checks from one table to another. Sometimes servers leave work early, and the tables need to be transferred to other servers. Sometimes, customers change tables (e.g., from non-smoking to smoking). Perhaps they want to sit with friends at another table. In these cases, the manager can accommodate the change on the POS system.

A manager also has the power to review any guest check at any given time. A manager may want to make sure that everything on a table is on the guest check. For example, if a manager sees a table with a few bottles of expensive wine on it, the manager can view that check on the monitor and review the charges.

In addition, managers can pull sales results for any time of day, area, or server from the POS terminal. This allows managers to monitor the restaurant's sales progress throughout the day. Also, the sales print-outs help the kitchen manager keep track of inventory availability. If the kitchen manager knows the restaurant started the day with 25 filets, and the sales report shows that 20 have been sold, then 5 filets should be left in inventory. In addition, the POS terminal keeps track of the 86 Count. (The 86 count means an item is out.) When 5 or fewer menu items are left (e.g., filets), the POS system gives the servers a warning. Once the item is sold-out, the 86 Count will appear, and the server knows immediately that an item is sold-out.

Why is the 86 Count a great control feature? Communication is important in a restaurant. In many cases, when an item is sold-out, servers are not aware of it. By the time the kitchen tracks down the servers to tell them that a meal is sold-out, five or ten minutes have passed. Customers must then order another meal, and wait longer for their meal to arrive. It is better for servers to know which menu items are running low during their shifts, and when an item is sold-out. The POS terminal notifies the server if a meal is sold-out immediately upon entering it into the terminal. The customer can then be contacted immediately to reorder, and the kitchen is spared the inconvenience of tracking down servers to tell them when items are sold-out. Figure 3-9 "Sample 86 Count Report" is an example of an 86 Count Report. Not all systems produce 86 Count reports.

Figure 3-9
Sample 86 Count Report

86'D ITEM REPORT	
Uncle Dan's Restaurant	
Fri Nov 10, 20XX	
Who: Bar Manager	
When: 3:5 1 PM	
Item Id: 1030	Name:Heineken
Remaining: 0	Orig count: 5
Who: Kitchen Manager	
When: 4:00PM	
Item Id: 2000	Name:Halibut
Remaining: 0	Orig count: 5

Lastly, management has the ability to access all cash drawers. Managers can pay cash out of the drawers for certain expenses such as C.O.D. deliveries or supplies. Managers can also receive cash for non-menu items such as for gift certificates or t-shirts.

Menu Management. A POS system can be programmed to show certain menus at certain times (i.e., lunch menu is shown from 1lam to 4pm). Also, special pricing can be used during certain time periods, such as during "Happy Hour."

Menu items are set up either as "Tax Included," "Tax Extra," or "Non-taxable." The distinctions are as follows:

- *Tax Included–used* for items served at the bar. If a beer costs $2.50, the $2.50 includes the sales tax. The reason for such pricing in some instances is so the bartender can collect and make change quickly without small change (pennies, nickels, and dimes) when making change for customers.

- *Tax Extra–used* for items such as for entrees, appetizers, and desserts where the tax is added to the bill after the meal is completed.

- *Non-Taxable–used* for carry-out if exempt by state and local law, and for tax exempt functions (e.g., charitable or governmental gatherings).

The menu items are set-up in the software's menu editor. Modifiers are added to menu items which may include cooking instructions, side dishes, or condiments. For example, in our previous example on Figure 3-4 "Sample Modifiers for Hamburger," the modifiers for a hamburger appear. The menu editor also controls where the item prints: the bar or kitchen printers.

One last feature of the menu manager is that new or special menus can be programmed to appear at designated times or days. For example, on some systems, if a restaurant has plans to offer a special New Year's Eve menu, it appears only on December 31st. The regular menu will return the next day. This feature allows management to work on menus in advance, store them, and pre-program them to be used on designated dates. This makes menu management simple.

Certain menus may be closed to servers during designated hours. For example, if a restaurant chooses not to serve off the lunch menu during dinner hours, the lunch menu can be closed to servers. Managers, however, can be given access to other menus for use in unusual circumstances.

Tips. Some POS systems automatically track credit card tips. Some tips are recorded on credit card authorization terminals. When a server clocks out, the POS terminal asks the server two questions:

(1) Enter your cash tips: (2) Enter your tips paid to others:

The POS system prints out a timekeeping receipt similar to Figure 3-10 "Sample Cash Tips Report." The server signs the print-out, and gives it to the cashier. The restaurant now has evidence of the server's tips for Internal Revenue reporting purposes. (Tip reporting will be discussed in detail in Chapter 6.)

Figure 3-10
Sample Cash Tips Report

Timekeeping Receipt
Uncle Dan's Restaurant
Fri Nov 10, 20XX

Server 11

Payroll ID 268-90-9999

In at: 10:49am Out at: 2:19pm
Worked: 3 hr 30 min

Cash tips:	10.00
Tips paid to others	5.00

Signature______________________

Before the server leaves the restaurant, some systems allow a cashier to print out a Server Sales Report. A Server Sales Report is a lengthy, detailed report about a server's sales for the day and the amount owed the cashier (if server-banked). Figure 3-11 "Sample Server Sales Report" is an example of a Server Sales Report. This report gives a listing of every guest check, method of payment, server statistics, tips collected, and the amount owed to the cashier.

This Server Sales Report is for Server 11. All the guest checks and modes of payment are listed. The receipts are adjusted for taxes and tips to show the actual amounts collected for food and beverages, $77.84. The cash due the cashier is $42.25. Statistics include sales per check and sales per guest. Management can easily evaluate a server's performance on a daily basis. Lastly, the report lists the tips reported by the server and the server's percentage of tippable sales.

Figure 3-11
Sample Server Sales Report

SERVER SALES REPORT

Uncle Dan's Restaurant
SERVER 11

Fri Nov 10, 20XX
PAID CHECKS

Chk	Tlb	Tender Paid	Chg Tip
200	104	AMEX 40.50	8.00
201	101	Cash50.25	

Total Receipts	90.75
Tax collected	-4.91
Chg tip	-8.00
Adj Guest Recpt	77.84

RECONCILIATION

Adj Guest Recpt	77.84
Chg tip collect	8.00
Tax collected	4.91
Total Receipts	90.75
Less Non-Cash Payments:	
AMEX	-40.50
Cash Collected	50.25
Less Charged tips	-8.00
CASH DUE	42.25

SERVER SALES REPORT (CONT.)

STATISTICS

Sales Type	Amt
FOOD	85.00
BEER	5.75
Total Sales	90.75

Total Checks	2
Total Guests	5
Sales per Check	45.37
Sales per Guest	18.15
Tippable Sales	77.84

TIPS

	Tippable Sales	Tips	%
Charges	40.50	8.00	19.75
Cash	50.25	10.00	19.90
Total	90.75	18.00	19.83
Less tips paid out		-5.00	
Net tips		13.00	14.33

BACK-OF-THE-HOUSE FEATURES

At the end of the day, the managers will run a final tape of activities at the POS terminal. Management must decide which reports are most relevant to their needs. The following reports are available on most POS systems:

- *Drawer Insert Reports for each cash drawer*–summary of sales, cash and charge activity in the drawers.

- *Charge Summary Reports*–amount and account number for every credit card charge.

- *System Sales Reports*–comprehensive report of all sales, discounts, service charges, pay-ins, pay-outs, voids, statistics, and tips.

- *Menu Item Sales Report*–listing of all items sold, number of sales, dollar amount of sales arranged by category or department.

- *Labor Report*–time checked in and out for all restaurant employees, and the total cost amount of labor for each employee for the day.

POS summary reports are long, since they are printed on a series of tapes. Tapes usually print in sections. Similar reports printed in the back office off a laser printer or dot matrix printer are usually easier to read and better for analysis purposes.

Back-office reports are used for management purposes of controlling and planning. These reports include:

- *Business Summary Report*–reports sales by area and time frame, average check by area and time frame, sales by server, and discounts and coupons. This report presents management with a clear snapshot of the restaurant's activities for the day. An example is shown in Exhibit 3-5.

- *Sales, Taxes, & Receipts Summary*–reports sales by area and category and lists the sales tax. This report would be used to record the sales tax liability for the day. An example is shown in Exhibit 3-6.

- *Item Sales Report*–detailed listing of items sold by quantity, average price, and percentage of sales. This report will help with menu and entree sales analysis. An example is shown in Exhibit 3-7.

- *Other Reports*–These include the Discount and Coupon Report, Cash Pay-in Report, Cash Pay-outs Report, and Voids Report. These reports are similar in format to the Discount & Coupons Report.

All of these reports provide management with ample information for decision-making purposes. The number of items sold per day should coincide with inventory counts. Labor costs can be tracked during the day. Server performance can be evaluated daily by average check amount per customer or table. Also, coupons can be tracked and aid in the analysis of the restaurant's marketing program. Menu items, tracked daily for sales, can be used for future menu planning. The greatest advantage of POS systems is that it provides managers with information produced "on demand" about restaurant performance.

INTEGRATION WITH ACCOUNTING SOFTWARE

The system described in the POS primer has both sales and timekeeping features. POS systems can also be integrated with table management, inventory control, in-house accounting, payroll processing, scheduling, forecasting, performance appraisal, and menu production software packages. The POS system is only one of the many software packages available to restaurants.

Chapter 7 has a detailed summary of the various software packages available to restaurants. The most applicable to POS systems would include inventory, cost control, and payroll packages. Controlling food, bar, and labor costs is important for a restaurant to remain profitable. The POS package will integrate with these packages to make a fully integrated accounting package.

SALES AND MENU ANALYSIS

TRACKING PROFITABILITY

POS systems can provide detailed information regarding entree sales. Entree sales can be tracked by day, week, month or year to determine the high and low selling items. Some menu items are seasonal. Figure 3-12 "Sample Entrée Analysis Report" is an example of how food sales can be tracked on a weekly basis:

Figure 3-12
Sample Entree Analysis Report

Entree	M	T	W	R	F	S	S	@	Food Cost	Selling Price	Gross Profit	Weekly Profit Dollars
Triple Decker	10	5	11	12	9	8	8	63	3.50	6.25	2.75	173.25
Corned Beef	4	7	8	9	4	5	5	42	3.15	5.25	2.10	78.20
Tuna Salad	12	12	13	14	15	13	12	91	1.50	5.25	3.75	341.25
Chicken Salad	14	15	16	17	15	12	10	99	2.10	5.25	3.15	311.85
Philly Sandw	12	5	11	10	9	8	11	66	3.25	6.50	3.25	214.50
Hamburger	20	15	20	25	22	18	19	139	3.25	5.20	1.95	271.05
Total	72	59	79	87	74	64	65	500				1400.10

Such tracking is often called menu engineering to determine high volume, high profit items versus low volume, low profit items.

The Entree Analysis Report gives managers important feedback concerning sales. The number of sales per entree may be tracked by day and week. The most popular entree on Figure 3-12 is hamburgers, selling 139 units, and the least popular entree is corned beef, selling 42 units.

In addition, the most profitable item per gross profit dollars (number of entrees times gross profit) is highlighted in this report. Tuna salad is the most profitable item and corned beef is the least profitable item.

As a result of this simple analysis called menu engineering, management might consider discontinuing the corned beef sandwich as an entree. It is neither popular nor profitable. This makes room for the addition of another menu item. Sales revenue will increase, if the new entree is more popular and profitable than the discontinued item.

Another use of the entree chart is to aid management in comparing the gross profit dollars for various menu items. They can use this in setting menu prices, or encourage servers to sell the larger dollar gross profit items. A $4.00 sandwich may provide a $1.50 profit whereas a $3.00 appetizer may produce a $2.00 profit based on gross profit dollars. Management can run a contest to promote sales of certain products or pay servers commission for promoting and selling certain products (like dessert or appetizers).

MENU PRICING

There are several ways to price a menu item.[2] One way is to add a standard mark-up. For example, the chicken salad sandwich has a food cost of $2.10. If the desired targeted food cost is 40%, then the price charged to the customer would be $5.25, calculated as follows:

$$\frac{\text{Menu entree cost}}{\text{Target food cost}} = \frac{\$2.10}{40\%} = \$5.25$$

However, the customer may be willing to pay more for the sandwich, depending on the target market and the type of restaurant. To base the menu prices on customer expectations is called perceived-value pricing. If a restaurant is upscale and has a classy atmosphere, the price of a chicken salad sandwich should probably be higher than one served at a truck stop.

Management needs to evaluate menu entrees on a regular basis for profitability and popularity. The hamburger in Figure 3-12 has the lowest gross profit per unit ($1.95), but sells the most units (139). This item is called a "loss leader." It is a popular but low profit margin item. The restaurant is not

[2]Center for Foodservice Education, How to *Improve Financial Management & Controls in Foodservice Operations,* Houston, TX, 1995, pgs 6-3, 4, and 18.

going to make large profits on the hamburgers, but hopes to make it up by selling high margin items such as appetizers, drinks, or desserts.

Entrees with both high profitability and popularity are classified as "winners." Entrees with low profitability and low popularity are classified as "losers." The "losers" either need to be dropped and replaced, or moved to another location on the menu that encourages customers to buy them.

Menu Placement and Design

Highlighting certain menu items and placing them strategically on a menu is another way to increase sales of those items. The high profit items should be placed either first or last in any given column on the menu. Experts state that items in these spots are selected most often by customers. Also, highlighted items, such as in a frame or box, are picked by customers over non-highlighted items. Hearts placed by low-fat meals draw attention to those meals.

Some studies have shown that customers read menus in a certain order. Again, it is important for an owner to place items on the menu in a strategic manner. It is also recommended that menu items be rounded by $.25, $.50, or $.95 increments. Customers do not notice the higher price, and restaurant profitability increases.

Finally, servers can sell menu items through suggestive selling. Throughout the course of the meal, the server asks the customers if they would like to order appetizers, drinks, or desserts. Some restaurants ask servers to subtly encourage customers to purchase high margin items. For suggestive selling to work in a restaurant, management needs to rank servers (by check average and add-ons) and reward those with excellent performance.

PURCHASING A POS SYSTEM

If a POS system is desired, there are many factors to be considered when purchasing a system. A food service operator needs to consider the following:

- *Price and payment terms*–the price should be competitive and the payment terms flexible. A system with a back-office PC (pentium processor, modem, and back-up), two POS terminals, two remote printers, credit card processing, and timeclocks might cost a restaurant approximately $10,000 - $15,000.

- *Needs*–the system must meet the restaurant current needs and have the expandability to meet future growth.

- *Ease of use and training features–the* system must be easy to use. Some POS distributors provide on-site management training on all aspects of POS use. Server training may take a few hours to several days. Vendors should be questioned concerning these issues. References should be checked.

- *Vendor support and reputation–a* vendor must be financially sound to provide continued support of the POS hardware and software.

- *System performance and durability–a* system should run smoothly and be durable. Sometimes touch screen systems have problems with the monitors malfunctioning. Buyers need to investigate the advantages and disadvantages of the various types of POS systems.

After selection of the POS system, managers need to know how to use the system for analysis and control purposes. If they do not, the POS system serves merely as a glorified and very expensive cash register. Management must take time to practice using the system and exploring its capabilities.

COUPONING

A successful discount program is a "hit or miss" experiment for many restaurants. There are several types of coupon and discount programs available, including:

- Frequent buyer cards;

- Early bird specials;

- Two-for-one specials; and

- Free dessert or appetizer with meal.

Coupon effectiveness depends on the age of the restaurant, location, budget, and demographics of the surrounding community. New restaurants need to get their name out. They will probably spend much more on advertising than an established restaurant. The following are various means of advertising that can be effective for restaurants:

- Newspapers;

- Radio or television;

- "Entertainment" book;

- Direct mail–either bundled with other coupons or by itself;

- Flyers; and

- Trade or barter clubs.

If possible, restaurateurs should discuss their advertising programs with other owners. Some programs work better than others. All owners agree, however, that referrals are the best and most inexpensive form of advertising. Some owners feel that it is more important to invest in its "regular" customers by occasionally giving them a free dessert or gift certificate. Other restaurants offer "regulars" frequent diner cards or discounts.

One good idea is to limit couponing to "slow" evenings or "slow" hours. The goal of couponing is to fill empty seats. Coupons are not intended to displace full paying customers with discounted customers, especially on a busy night.

Many restaurants find barter clubs help with their cash flow. The Barter Club markets its members to customers through flyers, magazines, and via fax. The Barter Club of Columbus, OH, for example, has over 5,000 members. The members frequent member restaurants and purchase meals by barter. The restaurants' accounts are credited for the sales, and they can use their accounts to purchase goods or services later. One Columbus area restaurant used its barter account to purchase a $24,000 tile floor and a $10,000 landscaping job. Another restaurant used its account to purchase an $8,000 refrigeration system.

The fee paid to the Barter Club is 10% of purchases. This can be viewed as the equivalent of a 10% coupon on meals. If belonging in the Barter Club brings in a substantial amount of business, then the 10% discount is worth it.

In conclusion, whatever discount or coupon program restaurants choose, management must monitor its results. In time, restaurants will discover what works for them.

SUMMARY

Controls in sales reporting are of the utmost importance. All items prepared at the kitchen and bar must be charged to customers, and the monies collected must be paid to the cashier. A POS system can best help to accomplish these goals. If a restaurant cannot afford a POS system, at a minimum the duplicate paper check system should be used.

Tracking sales by entree (performed automatically by the POS system) enables management to perform sales and menu analysis. Management can make educated decisions concerning the pricing and retention of menu items. Servers can also be evaluated on their performance concerning add-ons such as appetizers, drinks, and desserts. Since POS systems track entree sales by server, rewards can be given to servers to encourage good performance.

In conclusion, there are many aspects of sales and menu management within the restaurant. A properly chosen POS system should help management manage effectively. Paperwork is cut dramatically, and controls are in place to ensure that, at a minimum, items leaving the kitchen and bar areas are charged to customers. Authorization controls for discounts, complimentary meals, voids, and service charges can serve to cut down on server omissions or errors. Most experts agree that POS systems will save restaurants money in the long run and are worth the investment.

EXHIBIT 3-1

SAMPLE GUEST CHECK WITH STUB

GUEST		CHECK		
Server	Table	Guest	Date	#688
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
			FOOD	
			BEV	
THANK YOU			SUB	
			TAX	
			TOTAL	
				#688
			DATE	
			AMOUNT	

EXHIBIT 3-2

SAMPLE CASHIER'S REPORT[3]

Form 1 -A

Cashier's Summary

DATE____________ DAY____________ PREPARED BY__________________________

	(A) Bar Register	(B)	(C) Service Register	(D)	(E) Total
1. **Bank Deposit** Part I	Day	Night	Day	Night	All Shifts
2. Currency					
3. Silver					
4. Checks					
5. Subtotal					
6. Credit Cards:					
7. MasterCard/Visa					
8. American Express					
9. Diners Club					
10. Other					
11. Other Receipts					
12. Total Bank Deposit					
13. **Cash Summary** Part 11					
14. Sales per Register					
15. Sales Tax per Register					
16. Adjustments:					
17. Over/Under Rings					
18, Other: Complimentaries					
19. Other					
20. Total Adjustments					
21. Sales to Be Acctd. For					
22. Sales Tax to Be Acctd. for					
23. Accounts Collected					
24.					
25. Other Receipts					
26.					
27. Tips Charged:					
28. MasterCard/Visa					
29. American Express					
30. Diners Club					
31. Other					
32. House Accounts-Tips					
33. Total Receipts					
34. Deduct: Paidouts					
35. Tips Paid Out					
36. House Charges					
37. Total Deductions--					
38. Net Cash Receipts					
39. Bank Deposit (Line 12)					
40. (Over) or Short					

95

[3]Reprinted with the permission of the National Restaurant Association.

EXHIBIT 3-3

SAMPLE Z-TAPE

MAJOR GROUP SALES REPORT

Uncle Dan's Restaurant

Current from Nov 10, 'XX
Nov 10, 'XX 10:30PM

1BEVERAGES	174 161.70	8.5%
2 BEER	29 36.25	1.9%
3 LUNCH	95 498.75	26.1%
4 DINNER	110 1017.50	53.3%
5 DESSERTS	16 32.00	16.7%
6 APPETIZERS	162.50	50 8.5%
TOTAL NET SALES	474 $ 1908.70	

TAX REPORT

Uncle Dan's Restaurant

ITEM NO TAX	155.00
FOODTX SALES	1555.75
FOOD TAX	89.45
EXEMPT FOODSL	155.00
BAR SALES	197.95
BAR TAX	11.32

SYSTEM BALANCE REPORT

Uncle Dan's Restaurant

SERVICE, NET SALES		1480.77
# GUESTS, $AV 210		7.05
# CHECKS, $AV 100		14.80
TO GO, NET SALES		155.00
# GUESTS, $AV 10		15.50
# CHECKS, $AV 5		31.00
TABLES:		
#TURNS, $AV	89	21.44
AV TURN TIME (MINS)		65

EXHIBIT 3-4

SAMPLE DAILY SALES REPORT[4]

Form 1-B

Daily Report

Day__________________ Weather__________________ Events________________________ Date________________

Sales and Sales Tax Collected	Bar Register		Service Register		Totals		Last Month
1 By Source	Lunch	Dinner	Lunch	Dinner	Today	Month To Date	To Date
2. Food Sales							
3. Regular Menu							
4. Oyster Bar, Other							
5. Total Food Sales							
6. Beverage Sales							
7. Liquor							
8. Beer							
9. Wine							
10. Soda, Other							
11. Total Including Sales Tax							
12. Sales Tax on Beverage Sales							
13. Total Beverage Sales							
14. Total Food & Beverage Sales							
15. Gift Shop & Misc. Sales							
16. Total Restaurant Sales							
17. Sales Tax Collected							
18. Adjusted Sales and Sales Tax per Cashier's Summary							

NOTE: When printing this form for restaurant use, this page and the one following should be both placed on one page with the back page on the reverse side.

[4] *Ibid.*

Form 1-B

Daily Report (cont'd)

19. Cash Summary	Amount	
20. Food Sales		
21. Beverage Sales		
22. Gift Shop & Misc. Sales		
23. Sales Tax:		
24. Food		
25. Beverage		
26. Gift Shop & Misc. Sales		
27. Accounts Collected (Over)		
28. Other Receipts (Over)		
29. Tips Charged		
30. Total Receipts		
31. *Deduct.*		
32. Paid Outs (see Detail)		
33. Tips Paid Out		
34. House Charges		
35. Allowance/Complimentaries		
36. Total Deductions		
37. Net for Deposit		
38. Bank Deposit		
39. (Over) or Short		

	Customers Served Average Check									
40. Meal Period	Today		This Month To Date		Last Month To Date		This Month		Last Month	
41. Lunch										
42. Dinner										
43. Total										

44. **Sales Summary**								
45. Meal Period	Today		This Month To Date		This Year To Date		Last Year To Date	
46. Food								
47. Lunch								
48. Dinner								
49. Oyster Bar, Other								
50. Total								
51. Beverage								
52. Lunch								
53. Dinner								
54. Total								
55. Gift Shop & Misc.								
56. Grand Total								

57. Paidouts	Food		Other		Total	
58.						
59.						
60.						
61. Total Paidouts						

Form 1-B

Daily Report
(continued)

Back Page

Day Date 19

Check Number	**Customers' Accounts Charged**	Total Amount Charged		Tips Charged	
	Total Accounts Charged				

Other Receipts	Amount	

Customers' Accounts Collected	Amount	

Allowances/Complimentaries			
Name	Reason	Amount	
	Total		

Accounts Receivable	Amounts	
Balance Yesterday		
Today's Charges		
Total		
Today's Collection		
Allowances		
Balance Today		

Prepared by: Date Prepared:

100

EXHIBIT 3-5

BUSINESS SUMMARY REPORT
UNCLE DAN'S RESTAURANT
FRIDAY NOVEMBER 10, 20XX[5]

SALES BY DAY-PART & LOCATION (Sales plus Service Charges; less Discounts; less Extra **Taxes)**

	DINING ROOM		BAR		TAKE OUT		MEZZANINE		TOTALS
ALL DAY	628.83	60%	81.75	8%	.00	0%	343.90	33%	1054.48
BREAKFAST 4AM- 11 AM	.00	0%	.00	0%	.00	0%	.00	0%	.00
LUNCH 11AM-4PM	628.83	60%	81.75	8%	.00	0%	343.90	33%	1054.48
DINNER 4PM-4AM	.00	0%	.00	0%	.00	0%	.00	0%	.00

TAXES	AMOUNT SOLD	RATE	LIABILITY
5.75% TAX EXTRA	947.85	5.75% Extra	45.00
5.75% TAX INCLUDED	81.75	5.75% Included	4.45

PAYMENT SUMMARY

CASH	752.02	VISA/MASTERCARD	195.51	TOTAL RECEIPTS	1183.18
AMERICAN EXPRESS	214.95	TOTAL PAYMENTS	1162.48	LESS DISCOUNTS	<20.70>
				LESS CHARGED TIPS	<63.00>
				LESS SERVICE CHARGES	<24.88>
				LESS TAX LIABILITY	<49.45>
				DEFERRED SERVICE CHG	.00
				NET SALES	1025.15

AVERAGE CHECK & COVER BY DAY, PART & LOCATION (Sales plus Service Charges; less Discounts; less Extra Taxes)

DINING ROOM				BAR			TAKE OUT			MEZZANINE			TOTALS		
	Cvrs	Avg chk	Avg cvr	Cvrs	Avg chk	Avg cvr	Cvrs	Avg chk	Avg cvr	Cvrs	Avg chk	Avg cvr	Cvrs	Avg chk	Avg cvr
ALL DAY	44	27.34	14.29	0	10.21	.00	0	.00	.00	24	24.56	14.32	68	23.43	15.50
BREAKFAST 4AM-11AM	0	.00	.00	0	.00	.00	0	.00	.00	0	.00	.00	0	.00	.00
LUNCH 11AM-4PM	44	27.34	14.29	0	10.21	.00	0	.00	.00	24	24.56	14.32	68	23.43	15.50
DINNER 4PM-4AM	0	.00	.00	0	.00	.00	0	.00	.00	0	.00	.00	0	.00	.00

SALES BY DEPARTMENT

	Qty	Amount	%		Qty	Amount	%		Qty	Amount	%
APPETIZERS	8	50.80	5	SOUPS	11	55.30	5	SALADS	12	64.50	6
SANDWICHES	12	87.40	8	ENTREES	38	312.80	30	DESSERTS	24	120.00	11
BEVERAGES	17	17.50	2	BEER	13	39.00	4	WINE-GLASS	17	80.00	8
WINE-BOTTLE	4	80.00	8	COCKTAILS	9	36.00	3	LIQUORS	26	81.00	8
NON ALCOHOLIC	16	26.00	2								

SALES BY SERVER

	Hrs	Sls/Hr	Ttl Sales		Hrs	Sls/Hr	Ttl Sales		Hrs	Sls/Hr	Ttl Sales
SERVER12	5	53	267	SERVER11	6	41	245	SERVER10	7	32	221
BARTENDER60	1	49	49	SERVER14	6	40	239	BARTENDER 61	2	17	33

DISCOUNTS & COUPON

	Num	Amount	Average
COMP FOOD ITEM	4	20.70	5.17

EXCEPTIONS

	Num	Amount	Average		Num	Amount	Average
INVENTORY VOIDS	9	45.20	5.02	NON-INV VOIDS	27	107.40	3.97

[5]Reprinted with the permission of Sable Technologies Inc.

EXHIBIT 3-6

SALES, TAXES & RECEIPTS SUMMARY
UNCLE DAN'S RESTAURANT
FRIDAY NOVEMBER 10, 20XX
ALL DAY[6]

NET SALES BY CATEGORY & LOCATION (Sales net of Discounts and all Taxes)

	DINING ROOM	BAR	TAKE OUT	MEZZANINE	TOTALS
FOOD	413.95	.00	.00	273.65	687.60
LIQUOR	53.25	77.30	.00	8.00	138.55
BEER	29.75	.00	.00	9.25	39.00
BTL WINES	80.00	.00	.00	.00	80.00
GLS WINES	27.00	.00	.00	53.00	80.00
MERCHANDISE	.00	.00	.00	.00	.00
TOTALS	603.95	77.30	.00	343.90	1025.15

TAXES

	AMOUNT SOLD	RATE	LIABILITY
5.75% TAX EXTRA	947.85	5.75% Extra	45.00
5.75% TAX INCLUDED	81.75	5.75% Included	4.45

PAYMENT SUMMARY

CASH COLLECTED	752.02	VISA/MASTER CARD	195.51	TOTAL RECEIPTS	1183.18
AMERICAN EXPRESS	214.95	TOTAL PAYMENTS	1162.48	LESS DISCOUNTS	<20.70>
				LESS CHARGED TIPS	<63.00>
				LESS SERVICE CHARGES	<24.88>
				LESS TAX LIABILITY	<49.45>
				DEFERRED SERVICE CHG	.00
				NET SALES	1025.15

DISCOUNTS & COUPON

	Num	Amount	Average
COMP FOOD ITEM	4	20.70	5.17

EXCEPTIONS

	Num	Amount	Average		Num	Amount	Average
INVENTORY VOIDS	9	45.20	5.02	NON-INVENTORY VOID	27	107.40	3.97

[6] *Ibid.*

EXHIBIT 3-7

ITEM SALES REPORT
UNCLE DAN'S RESTAURANT
FRIDAY NOVEMBER 10, 20XX
ALL DAY[7]

	Item ID	Item Name	Quantity	Sales	Average	% of Sales
APPETIZERS						
	6205	POTATO SKINS	4	23.00	5.75	.21
	6305	CHICKEN WINGS	4	27.80	6.95	.25
			---------	---------	---------	---------
	APPETIZERS	SUB TOTALS	8	50 . 80	6.35	4.83
SOUPS						
	6405	POTATO SOUP	7	31.50	4.50	.29
	6460	CHILI	2	9.90	4.95	.08
	6465	SOUP OF THE DAY	2	13.90	6.95	.12
			---------	---------	---------	---------
	SOUPS	SUB TOTALS	11	55.30	5.03	5.26
SALADS						
	6505	CEASAR SALAD	3	14.25	4.75	.13
	6510	MIXED GREENS-SM	7	33.25	4.75	.31
	6625	ALFALFA GREENS-SM	2	17.00	8.50	.15
			---------	---------	---------	---------
	SALADS	SUB TOTALS	12	64.50	5.38	6.13
SANDWICHES						
	6710	CHICKEN SALAD	8	55.60	6.95	.52
	6715	TUNA SALAD	4	31.80	7.95	.29
			---------	---------	---------	---------
	SANDWICHES	SUB TOTALS	12	87.40	7.28	8-31
ENTREES						
	7115	RABBIT RAGOUT-SM	9	63.00	7.00	.59
	7125	TROUT	4	39.00	9.75	.36
	7130	PASTA WITH MAR	6	34.50	5.75	.32
	7135	HALIBUT CAKE	5	37.50	7.50	.35
	7305	MIXED VEGETABLES	3	26.85	8.95	.25
	7330	FILET MIGNON-SM	3	35.85	11.95	.33
	7335	BOWTIE PASTA-SM	2	14.50	7.25	.13
	7340	BOWTIE PASTA-LG	3	29.85	9.95	.27
	7345	GRILLED VEGETABLES	1	9.75	9.75	.08
	7350	GR TUNA-SM	1	9.25	9.25	.08
	7355	GR TUNA-LG	1	12.75	12.75	.11
			---------	---------	---------	---------
	ENTREES	SUB TOTALS	38	312.80	8.23	29.77

[7] *Ibid.*

	Item ID	Item Name	Quantity	Sales	Average	% of Sales
DESSERTS						
	8405	MUDPIE	3	15.00	5.00	.09
	8410	ALMOND CREAM TART	9	40.00	5.00	.28
	8415	CHOC CHEESECAKE	5	20.00	5.00	.13
	8420	CHEESECAKE	5	20.00	5.00	.13
	8460	HOT FUDGE CAKE	2	10.00	5.00	.09
			---------	---------	---------	---------
	DESSERTS	SUB TOTALS	24	120.00	5.00	11.42

COMP FOOD ITEM

Item	Amount	Entered By	Check	Paid Sales	Reason	Account
CAESAR SALAD	4.75	MANAGER	2015	74.41	PROMOTION	
CHILI	4.50	TOM	2016	34.67	PROMOTION	
PORK SANDWICH	6.95	WILL	2018	50.60	PROMOTION	
MUSHROOM SOUP	4.50	JEN	2019	31.05	PROMOTION	
TOT COMP FOOD ITEM	20.70	9.8% of Gross Sales	4	190.73		
GRAND TOTALS	20.70	9.8% of Gross Sales	4	190.73		

CHAPTER 4

FOOD COST AND ENERGY COST CONTROLS

INTRODUCTION

The restaurant business has been called a "nickel and dime" business. For every dollar a restaurant collects, only five cents remain as profit. Thus, it is easy to understand why food cost control is important. Reduced food costs substantially improve the bottom line.

If food cost controls save five cents per dollar, the average restaurant will double its net income. For example, a restaurant with $1,000,000 in sales will increase its profits from $50,000 to $100,000.

This chapter will discuss cost controls to implement in the dining room and kitchen areas. Cost controls pertain to purchasing, receiving, and storage cycles, as well as the preparation and service cycle. Financial reports also aid in monitoring food costs. Many food cost controls are simple to implement and can prevent thousands of dollars of waste.

This chapter includes other cost control issues. For example, energy management during the food storage and preparation cycle affects restaurant profitability too. Monitoring the consumption of silverware, flatware, dishes, and glasses impacts net income.

FORECASTING AND PURCHASING

Order inventory at par is the number of items needed in stock to meet customer needs. Most restaurants also set a reorder point. For example, the reorder point for veal patties might be set at 10 boxes. When the number of boxes of veal patties drops to 10, they are reordered to bring inventory back to par. Reorder points must not be too low or else the restaurant runs the risk of a stock-out.

Restaurants should count inventory on a weekly basis. Some experts recommend tracking highpriced items and frequently consumed items on a daily basis for more control. The more often inventory is counted, the more likely it is that problems will be caught in a timely manner.

The following analysis in Example 4-1 can be completed to determine ordering needs. After par levels are determined, reordering is simple. Ordering is set to par with adjustments for seasonal changes.

Example 4-1:

Restaurant ABC wants to determine the quantity of roast beef to order to meet weekly demands for the 6-inch roast beef submarine sandwich. The following four steps determine the par for roast beef:

1. Entree sales are tracked on a daily basis:

Entree Sales by Day

DAY	MON	TUES	WEDS	THURS	FRI	SAT	SUN	WEEKLY
6-inch roast beef sub	109	80	108	100	75	35	20	527

2. Recipes for the roast beef sandwich are broken down into ingredients:

Recipe for 6-inch roast beef sandwich

2.5 ounces of roast beef
bread, condiments (chopped lettuce, ketchup, mustard)

3. The yield factor must be considered to determine shrinkage and how much roast beef needs to be ordered. Yield represents the net amount of the food item left after shrinkage and after waste is trimmed from it. For example, fat might need to be trimmed off a steak.

   If the yield factor for roast beef is 94%, then it takes 2.66 ounces of roast beef to make one sandwich:

$$\frac{2.5 \text{ ounces}}{94\%} = 2.66 \text{ ounces}$$

4. The amount of roast beef required on a weekly basis to meet current demand is:

527 entrees x 2.66 ounces
= 1401.82 ounces or 87.62 pounds of roast beef

In this example, par might be set at 100 pounds and the reorder point might be 30 pounds.

A reasonable par level must be established. If too much stock is on hand, then there could be spoilage or theft. If there's too little stock on hand, then there could be a stock-out. In that case, customers are unhappy because they can't order what they wanted.

PURCHASING

The guiding factors when choosing a vendor are: service, quality, and price. Restaurants need good service and quality products in order to run effectively. In order to get the best prices, experts suggest obtaining bids from vendors on a weekly basis on all major food items such as meat, dairy, seafood, and produce. The bid system enables restaurateurs to make purchases at the lowest price, and keeps purveyors honest. If a vendor knows its customers are getting bids on items, purveyors are motivated to price competitively.

On the other hand, some restaurateurs feel it's better to consolidate vendors. The advantages are:

- *Fewer deliveries.* There will be less disruption in the kitchen since fewer purveyors are dropping items off. There is less work for the bookkeeper due to fewer orders, receiving reports, and invoices.

- *Quality service.* If a restaurant is a primary customer, the purveyor may provide better service by delivering products at the requested times and making special deliveries in emergency situations.

- *Better prices.* Volume discounts may be available to customers that order larger quantities. Also, as the relationship develops between the vendor and restaurateur, the vendor may give better discounts to promote goodwill.

- *Recommendations.* The vendor might be able to make helpful recommendations to a good customer. For example, if blueberries are becoming costly, the purveyor might recommend ordering raspberries if the price is more reasonable.

- *Higher quality products.* If the restaurant is a good customer and tells the purveyor that it needs quality products, the purveyor may give its best products to the established customer.

Note: Most restaurants have a primary supplier, a secondary supplier, and several other "fill-in" suppliers.

Even if vendors are consolidated, foodservice operators should compare prices periodically to ensure they are getting competitive prices. Restaurateurs also need to specify quality or grade when they order, or else they may not receive the best stock. If restaurateurs have problems with quality or prices, they should not hesitate to change vendors.

RECEIVING AND MAINTAINING INVENTORY

Restaurants should strictly follow these rules when receiving inventory:

- Delivery should occur during "slow" hours so warehouse personnel may inspect the goods. Only restaurant workers should carry food into the storeroom. The delivery person should stay at the back door. The storeroom should remain locked throughout the day. Some restaurants use video cameras to monitor the activity near and in the storerooms.

- All items should be inspected for brand name, grade, expiration dates, quantities, price, and quality. Items at the bottom of the boxes and cartons (such as produce) should be examined for quality and freshness. Purveyors have been known to put defective or older merchandise at the bottom of boxes or cartons. All items should be counted and weighed. Receiving personnel should not sign the receiving report until the inspection is complete. Any changes to the reports should be made immediately, noted, and signed by the driver.

- All items must have a distinct storage spot. Sometimes restaurants set up their storerooms to match alphabetized inventory sheets. Inventory sheets should be set to match the storeroom, not vice versa. It is best to adjust the storeroom so that small and easy to pocket items such as bottles of ketchup are not near the entrance. Instead, place large bags of flour, rice, or sugar, for example, near the entrance.

  All goods must be tagged with the date received. Arrange or rotate stock so that the oldest items are used first. The first-in, first-out (FIFO) method should be used when issuing goods. Stock with expired dates should be discarded. A written report of discarded food should be submitted to management.

- The bookkeeper or manager must reconcile invoices to receiving reports to ensure proper billing.

FOOD COST CONTROLS–"EVERY PENNY COUNTS"

Many food cost controls may be implemented in restaurants. Sometimes foodservice operators ignore controls because the savings seem so inconsequential. Many restaurateurs remark that they do not have the time to monitor so many controls.

Such perceptions only hurt restaurant profitability. As stated earlier, the restaurant business is a nickel and dime business. Pennies saved by implementing controls accumulate and save thousands of dollars.

Food cost controls should be implemented in both the kitchen and on the serving floor. One goal of food controls is to save money, but another is to maintain quality. By adding quality controls to the preparation cycle, the customer will consistently receive quality meals.

KITCHEN CONTROLS

The goal of kitchen managers is to minimize waste, overportioning, and over/undercooking of food. The importance of following the kitchen controls must be emphasized to all kitchen personnel.

Standardized Recipes. For consistency's sake, recipes should be written down and in plain sight. In fact, a picture of each entree with its proper garnish should be posted to promote consistent meal preparation. Customers expect to receive the same quality meal each time they visit. Exhibit 4-1 "Specs for the Spec" summarizes the benefits of using standardized recipes.

Cooking instructions must be followed meticulously. Overcooking causes shrinkage and decreased food quality. Timers and thermometers should be used whenever possible. Losses from overcooking add up. Often managers give free or replacement meals, free appetizers, or desserts to customers that complain about the food quality. Also, there is a good chance that customers will not return to the establishment in the future.

Restaurants need to be especially careful at the end of the shift. The kitchen staff may be tired and preparation tends to become careless. One "bad" night can cost a restaurant thousands in lost future revenue. Examples 4-2 and 4-3 demonstrate the impact of one "bad" meal served to a few customers:

Example 4-2:

- A group of four customers enter the restaurant near closing. Two of the four are regular customers and two are new. They order four meals, and one of the meals is clearly unsatisfactory. The plate presentation is so bad that it becomes the dominant topic of conversation. When the server asks how the meals are, the customers complain. The server takes the unsatisfactory meal away and shows it to the manager. The manager gives a free meal to the customer to replace the bad meal. What is the cost to the restaurant?

- First, $8 of revenue is lost for the free meal, as well as the cost of food in the original meal. Second, and more importantly, the restaurant lost future revenues from the two regulars if they decide not to return in the future. The two regulars estimated that together they spend at least $1,200 at the restaurant in one year. Finally, the new customers will probably never come back.

Example 4-3:

- Two customers go to a restaurant and order steaks near the end of the day. Both steaks are ordered medium, but arrive undercooked (raw in the middle). The server takes the plates back to the kitchen and puts them in the microwave. The food is then returned to the customers overcooked. The customers complain, and the server gives them their meals at no cost. The customers, both regulars, recall other bad experiences and decide not to return in the future. The following weekend one of the regular's friends says, "Let's go to XYZ Restaurant," and the regular states, "No way, I've had too many bad experiences there."

(continued)

Example 4-3 (Continued):

- Again, besides losing the revenues for the free meal, future revenues are lost from the regular and potential customers. As one restaurant manager stated, "a restaurant is only as good as its last meal served."

Restaurateurs call unhappy customers "loose cannons." It is estimated that one "loose cannon" could tell 30 other individuals about their bad dining experience. No restaurant can afford such bad publicity in today's competitive market.

Standard Portions. Portions should be consistent. Meat portions should be weighed. Correct scoops and ladles need to be used when serving side dishes. If customers receive large portions of an item one week, and a smaller portion the next, they feel cheated. That is why consistent, standardized serving utensils are important.

Overportioning has a huge impact on the bottom line. Example 4-4 illustrates how cutting slices of meat 1 ounce too heavy for sandwiches affects net profits.

Example 4-4:

If a sandwich shop includes one extra ounce of meat (20c) per sandwich, and an average of 100 sandwiches are sold daily, it loses $7,200 a year:

- 1 ounce meat x 100 sandwiches per day x 360 days = 36,000 ounces extra for the year
- 36,000 ounces x $.20 (average cost of meat) = $7,200 per year

Personnel need to be trained about portions and periodically monitored. Equipment needs to be maintained. The blades in the meat slicer in a sandwich shop should be sharpened daily to ensure that meat can be cut in the proper portions.

Examining the waste left at the end of the day gives management an idea of what side dishes may have been served in excessive portions. For example, if most customers do not finish their rice, maybe the portions are too large or the rice is sour. Sometimes staff such as dishwashers may have valuable input into determining appropriate portions.

Make-or-Buy Decisions. Profits might be increased by purchasing pre-prepared food items. For example, it might be cheaper to buy cakes from a bakery than to have a baker prepare them in-house.

Initially the pre-prepared price may appear to cost more per pound or ounce than the raw product. Once the yield factor and labor costs are added into the product cost, however, it might actually cost less to purchase. Management needs to make sure that the quality of the prepared food is comparable, and that storage space is available for the product.

SERVICE CONTROLS

Servers may be trained to control costs as well as dealing effectively with customers. Following are several ways the servers can contribute to control costs:

Observation. Servers are the final quality control check before the meal is delivered to the customer. If the meal is not prepared correctly, the server should return the meal to the kitchen before the customer receives it. It is better to delay a meal than to serve an improper one and upset the customer. The server can apologize for the meal taking so long, and offer a free appetizer or dessert to compensate. Many customers will appreciate this and enjoy their visit to the restaurant.

Condiment Portions. Condiments such as lemon wedges, creamers, tea bags, and sugar packets can add up to dollars lost. If a customer requests additional lemon wedges, servers should bring out a conservative portion. Many servers, however, will bring a dozen or more out so they won't have to run back and get more later. Another example is rolls and butter. The customer would like another roll, and the server brings out five. This is a type of overportioning. Servers need to be trained to curb this tendency.

Condiments need to be limited. Fast food restaurants may limit access to condiments such as ketchup and mayonnaise to prevent customers from taking too much. Although each ketchup pack does not cost much individually, collectively they add up. In full service restaurants, customers may steal extra bottles of A-1 sauce or other condiments from service stations or servers may take them home. Service stations need be monitored by managers too.

MANAGEMENT CONTROLS

Management must implement and monitor the food cost controls. Following are several types of reconciliations that can to be completed to control food costs:

Production Report. Management should perform a production budget on a daily basis. Figure 4-1 "Sample Production Budget" represents a production budget:

Figure 4-1
Sample Production Budget

PRODUCTION BUDGET

ITEM	PAR	BEG INV	MAKE for Lunch	4:00 COUNT	MAKE for dinner
Filets	10	2	8	5	5
Salmon	15	3	12	2	13
Tuna	15	5	10	2	13
Shish kabob	25	10	15	5	20
Chicken	15	5	10	5	10

Column 1 is par, the number of items that need to be prepared to meet customer needs. Column 2 is the beginning inventory, and Column 3 represents the number that the restaurant needs to make to equal par. At 4:00 pm, management takes a count to see what is left in the kitchen. Then, it determines what needs to be made to reach par again for dinner.

For example, par for filets is 10. The 2 represents beginning inventory-the amount that has been taken out of the freezer and thawed. So 8 more filets need to be removed from the freezer. At 4:00 pm, the remaining filets are counted. There are 5 filets left, so 5 more need to be thawed for dinner.

The production budget can also be used to detect shortages. If 5 filets were sold during lunch, then 5 filets sold should be listed on the sales register tape. If only 4 filets show up as sold on the register tape or POS system, then there is a 1 filet variance. Management can then immediately investigate the cause for the variance: was there a free meal, theft, waste, or did a customer leave without paying?

Security Audit. Management probably does not have the time to take a complete inventory every day. It can, however, perform a daily reconciliation of the 20 most expensive items and the 20 most frequently consumed items in the restaurant.[1] The list can also include other items that management wants to monitor.

The security audit can also serve as a psychological control. Employees need to know that management is watching the inventory. In addition, if variances are discovered after the audit, management can take action immediately.

[1]Ron Yudd, Seminar on "Leadership Skills for Profit, Part 2, Profit Pointers," Co-published by Chicago, IL: Educational Foundation of the National Restaurant Association and Ron Yudd Seminars, 10181 Nightingale Street, Gaithersburg, MD, (301) 253-4728, 1996, page 5.

Cost Analysis. On a weekly basis, cost percentages (food costs/sales revenues) can be calculated for each menu category: Appetizers, Salads, Sides, Entrees, Desserts, and Beverages.[2] If a particular food cost percentage changes significantly, management can investigate the reason. Perhaps there is waste or pilferage, or perhaps the price of the ingredients increased. If the production price increases are permanent, then menu prices should be adjusted, or cheaper ingredients might be used to bring cost back into line.

Many experts suggest weekly cost analyses to control food costs. Experts state restaurants may increase profit margins 3 to 5% by performing weekly analyses and implementing kitchen and dining room controls. Example 4-5 shows a weekly analysis.

Example 4-5:

- Restaurant ABC wants to determine if its food cost percentage for sandwiches falls within an acceptable range or if there is a problem. Let's say the targeted food cost percentage is 25%. Restaurant sales for sandwiches are $2,550 for the week.

- An analysis is prepared in the following Weekly Food Usage Report:

	Weekly	Food	Usage	Report			
Sandwich Ingredient	Beginning Inventory	Purchases	Total	Ending Inventory	Used	Cost per Unit	Total Cost
Roast Beef	15.4	27.5	42.9	10	32.9	2.50	82.25
Ham	49	88	137	60	77	1.90	146.30
Turkey	31.6	48	79.6	35	44.6	2.00	89.20
Salami	32	37	69	21.8	47.2	1.80	84.96
Swiss Cheese	6	10	16	5.9	10.1	2.24	22.62
Amer Cheese	40	0	40	17	23	1.75	40.25
Bread	51	970	1021	50	971	0.11	106.81
Condiments		*Based on*	*Bread*	*Count*	971	0.15	145.65
Total							$718.04

$$\text{Food Cost \% for Sandwiches} = \frac{\text{Weekly Food Cost}}{\text{Weekly Sandwich Sales}} = \frac{\$\ 718.04}{\$2{,}550.00} = 28.16\%$$

In this report, the beginning inventory is in pounds for all items except bread and condiments. Bread is based on the number of buns used, and condiments are estimated at 15 cents per bun.

[2] *Ibid,* page 4.

Purchases are added to beginning inventory to get the total. The ending inventory is counted and subtracted from the total. By doing this, the amount of meat used is calculated. The amount used is multiplied by the cost per unit to give the total cost.

The total cost of each ingredient is added together to compute the total weekly food cost for sandwiches. The weekly food cost is divided by the weekly sandwich sales. In this case, the food cost percentage for sandwiches is 28.16%. This is higher than the targeted percentage of 25%. Therefore, there is probably some type of problem with sandwich costs. If the target percentage is correct, management should investigate the variance.

This type of analysis can be set up on a spreadsheet and performed for each menu category. This should give management a record of costs, allowing owners to know when there are efficiencies and inefficiencies, when to take action, and what needs attention.

Waste Audit. Waste, leftovers, scrap, and outdated products should not be disposed of without management's knowledge. Records of waste should be maintained so managers may better forecast purchases. Also, cooking mistakes should not be thrown away. Some of them might be able to be used later as employee meals.

Clear, see-through garbage can liners are recommended for waste disposal because stolen items may not be concealed for retrieval at a later time. Also, management can see flatware, dishes, or trays that have been thrown out.

When rushed, bussers, servers, and dishwashers are tempted to throw dishes and silverware out. One server stated that her employer, a steak house, had to order six boxes of new silverware every week. She remarked, "We just got too busy, and threw the silverware out. Nobody seemed to care. We sure didn't."

Some restaurant managers go through the garbage daily looking for kitchen items. One manager mentioned that his restaurant has saved hundreds of dollars through recovered silverware and other kitchen items. He searches the garbage twice daily.

ENERGY MANAGEMENT

The following is not a food cost control issue, but should be monitored closely since energy costs continue to rise. Energy management is another way for restaurants to cut costs. Management must train kitchen staff on how to conserve energy. There are several controls a restaurant can implement to control energy usage, thereby cutting utility costs.

Develop Standard Operating Procedures

Determine times when equipment should be turned on and off. Also, equipment not in use during "slow" times should be turned off and/or temperatures turned down. More and more major restaurant chains are writing and utilizing energy cost control manuals. They claim it cuts energy costs up to 10%.

Turn-on and turn-off times should be posted. Some restaurants use automatic timing devices to control start-up and shut-down times. It is easy for staff to forget to follow scheduled times when the restaurant is busy or understaffed.

The National Restaurant Association offers an Energy Management Kit. It has a bulletin discussing energy management and labels to place on equipment with turn-on and off times.

Maintain Kitchen Equipment

Equipment should be cleaned and serviced on a regular basis. Dirty equipment does not work efficiently. Heating elements, ranges, and grills need to be cleaned in order to operate efficiently. Refrigerator doors and gaskets need to be checked for proper fittings. Air conditioning filters should be changed on a regular basis.

Even something as simple as maintaining toilets saves on water bills. Faucets can be fitted with water-saving devices. Again, every penny counts.

Minimize Utility Rate Usage

Some areas offer different utility rates by peak and off-peak hours. If preparation work can be delayed to off-peak hours (such as weekends), saving on utility bills is possible.

Another option is to negotiate utility rates. Some large chains are doing this. In addition, use the utility company as an advisor. Most utility companies provide energy audits to help their customers cut energy costs.

Replace Inefficient Equipment With Efficient Equipment

It is not cost effective to purchase all new energy-efficient equipment. When replacing equipment, however, energy efficiency should be a purchase consideration.

There are many new products on the market that save energy. There are energy saving ovens, steamers, and dishwashers. There are energy saving rinse guns and hoses. Restaurateurs are advised to attend a restaurant show to examine a variety of options available to them.

PURCHASE AN ENERGY MANAGEMENT SYSTEM

Several firms specialize in energy management systems. They estimate savings for restaurants to be 10%–15% of monthly utility bills. Restaurants with monthly utility bills of $2,000 or more will probably find installing a system cost effective. The average system costs about $7,000 to install.

Energy management systems (EMS) continually monitor and regulate temperatures of refrigerators, freezers, preparation equipment, grills, and ovens. An alarm and a flashing message on a monitor warn management of problems. Also, remote monitoring is available on some systems. For example, Taco Bell uses a remote system. If store management does not respond to alarms within two hours, the remote monitoring station notifies Taco Bell's central headquarters. This ensures that energy problems are not ignored, but dealt with on a timely basis.

In addition to utility savings, the monitoring system promotes food safety. Since temperatures are regulated, food is stored and cooked at the proper temperature. This helps to reduce premature spoilage and cooking foods at the incorrect temperature.

The art of turning lights on and off is perfected by the EMS. Ordinary trippers and sensors do not operate as accurately as a computerized system. To conserve energy, EMSs can be programmed to turn signs on at dusk and parking lot lights when completely dark (rather than at the same time). Parking lot lights can be programmed to turn off 15 minutes after employees leave.

Machinery can also be programmed to work during the most productive times of day or when utility rates are lower. For example, ice makers produce ice faster in cooler temperatures than in hot. The EMS can schedule ice to be made at 3 or 4 AM when it's coolest out and when utility rates are the lowest. That might cut ice production time from 40 to 20 minutes, again saving utility costs.

Finally, EMSs keep records of run times on compressors. This makes it easy for restaurateurs to schedule maintenance times. The system will also note if a compressor is acting unusual, and warn management that maintenance is needed immediately.

SUMMARY

Management is responsible for monitoring food costs and implementing food cost controls throughout the preparation and service cycles. The more often inventory is physically counted, the better control management has.

Jay S. Fishman, Director of Area Operations of Wendy's International, feels that good food control relies on several basic policies[3]:

- Proper employee training and cross training;

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[3]Fishman, Jay. "Producing Profitable Results Internet Forum," http://www.profitable.com/results/forum/labor.htm, April 6, 1996.

- Good operating systems and accurate sales projections;
- A good attitude and commitment; and
- Good management of employee meal policies and theft control.

He warns that management needs to watch food costs during the non-peak hours.

> It's during the slow hours when you must keep product projections and hold times tight. Pay particular attention to evening hours from 8 to close . . . Pop back into your restaurant 5 minutes before closing to check out the waste and pilferage. . . . I think you'll find it eye opening.[4]

The "pennies" saved by implementing cost controls could add thousands of dollars to the bottom line. The importance of the cost controls must be stressed to all staff members so that a "cost consciousness" permeates the restaurant establishment.

Troy Brackett, publisher of "Producing Profitable Results," used the following technique to heighten the "cost consciousness" in his restaurant. Periodically, he gave staff members a simple exercise to complete. He told them to write down every cost problem they came across. When a person returned with their list, he complimented them on their awareness, and asked them to fix the problem. Many times they would fix the problem on their own.[5]

Lastly, another large cost saver is proactive energy management. Management is advised to develop standard operating procedures and maintain equipment costs in order to minimize utility costs. If utility bills are over $2,000 monthly, a computerized energy management system might be cost effective. Systems are estimated to save about 15% on monthly bills with savings as high as 30% at some establishments.

[4] *Ibid.*
[5] Brackett, Troy. "Producing Profitable Results Internet Forum," http://www.profitable.com/results/forum/ labor.htm, April 6, 1996.

EXHIBIT 4-1

"SPECS FOR THE SPEC" STANDARDIZED RECIPES[6]

1. Consistent product quality

2. Consistent product quality will yield consistent product cost information

3. Consistent plate presentations:

   - Specs for garnitures
   - Drawings/Photos of the finished plate

4. Components for standardized recipes

   - Exact amounts of ingredients
   - Ingredients listed in order of use
   - Use the proper terminology
   - Specific equipment references
     - Temperature
     - Mixer speeds
     - Blade sizes
   - Exact container sizes
   - Portion size and yield

[6]Reprinted courtesy of Ron Yudd Seminars–"Points of Profit"

CHAPTER 5

BAR COST CONTROL

INTRODUCTION

Effective bar management is important to a restaurant's profitability. With restaurant profit margins averaging only 5%, restaurants need to monitor their bar costs. Bar sales, on the other hand, often yield high profit margins. Average food costs may range from 25–35% of sales in contrast to average beverage costs of 15–25%. Wine sales are the most expensive, beer the least. Lack of bar controls is a weakness in many restaurants which results in millions of dollars lost to pilferage and/or overpouring each year. In addition, many establishments have suffered a decline in liquor revenue due to stronger enforcement of drunk driving laws. For this reason it is more important than ever to control bar revenues.

This chapter provides an overview of bar management. Foodservice operators need to forecast beverage purchases accurately, implement bar controls, and understand variance analysis in order to operate efficiently. In addition, personnel need training on bar issues as well as on legal issues of liquor liability.

ORDERING

TYPES OF BEVERAGES

The term "beverages" means "drinks sold from the bar," which include beer, wine, and liquor. Each type of beverage has its own unique shelf life and storage needs. These unique characteristics must be considered when forecasting and ordering goods. Following is a brief description of each type of beverage.

Beer. Beers are the most perishable of liquor types. Beer can be purchased in bottles or in kegs. Kegs yield a lower cost per ounce, but are more difficult to control. It is easier to count bottles of beer in inventory than to measure the amount of beer left in a keg at the end of a day.

Restaurateurs must also decide how many and which brands of beer to carry. Requests for brands not carried by the bar should be tracked. Low selling brands should be replaced with more popular brands.

Wine. Wine is the most expensive type of beverage, but has a long shelf life. Due to the high cost of wine, it should not be overstocked. Some restaurants carry rare brands. If this is the case, good security is essential to prevent theft.

Wine may be served by the glass, carafe, or by the bottle. Wine sales need to be tracked so stock is available to meet demand without building up inventory. Wine selection depends on the menu and ambiance of the restaurant. If a server suggests a wine, sales will increase. Often customers do not know which wine to order. Servers should be trained to sell wines offered by the restaurant. With proper training, servers can recommend appropriate wines that complement the menu.

Liquor. Liquor has a long shelf life. Liquor is stocked by generic product name and specific product name. For example, customers may order a drink by generic name (whisky and coke) or by specific brand name (Jack Daniels and coke). If the generic name is used, the bartender serves the house brand, which is usually a lower cost liquor. If a specific brand name is ordered, then the bartender uses it and charges the customer more for the brand name beverage.

The quality of generic liquors varies. Management must consider the restaurant's clientele when ordering. Well liquors are also available, but quality is often questionable. The peculiarities of liquor must be considered when forecasting bar needs.

FORECASTING AND ORDERING

Past sales are used to forecast bar purchases. Accurate records are necessary in order to forecast beverage needs. Ordering is based at "par," which is the amount of stock that meets daily sales with a built-in safety factor. A simple calculation for ordering follows:

Liquor item	Sales forecast	With safety Factor at 1.5	Amount on hand	Amount to be ordered
Jack Daniels	2 bottles	3 bottles	1 bottle	2 bottles
Generic rum	4 bottles	6 bottles	6 bottles	none

The safety factor is often 1.5 times the quantity usually served. Other restaurants may use a combination of two bottles at the bar (one opened and one unopened) and one or more "backup" bottles in the storeroom. The amount of backup is dependent on the beverages' sales volume. Each restaurant must determine its own par.

RECEIVING INVENTORY

The same care taken when receiving food from purveyors should be taken when receiving liquor. The following steps should be completed when receiving goods:

- Timing–delivery must occur during the "slow hours" so that management has time to inspect the goods. The delivery person should not be allowed in the storage area, to ensure the security of the restaurant's inventory.

- Inspection–check all beverages for brands, sizes, expiration dates, price, vintage, and quality. Count items received and match to purchase orders. All variances must be recorded on receiving reports. Management must have a convenient place to put the reports so that they are not lost or misplaced.

  Inspect bottles to ensure that neither bottles nor seals are broken. Also, kegs should be weighed to ensure that they are full.

- Recording and Storage–deliveries need to be logged in on inventory sheets or bin cards and items put away and secured. Beer should be stored in a refrigerated area, wine and liquor in appropriate, dry places. Storerooms must be locked.

- Reconciliation–the bookkeeper or manager must match invoices to receiving reports to ensure proper payment. Attention should be given to credit memos to ensure that the credits are received.

MAINTAINING INVENTORY

The liquor storeroom must be locked at all times. Only one person, usually the manager, has the responsibility for issuing stock. Most bars issue full bottles for empty ones. Bar requisitions should be recorded on a form. Exhibit 5-1 "Sample Bar Requisition Form" is an example of a bar requisition form recommended by the National Restaurant Association.

Exhibit 5-2 "Sample Bin Card" shows a bin card that is useful in maintaining a perpetual inventory system. Bin cards typically include the type of beverage, dates liquor is added or taken from inventory, the amount on hand, and an authorization signature.

The last feature of controlling inventory is conducting a weekly inventory. All bartenders should know that weekly inventories are taken as a psychological control. Knowing that shortages will be detected should deter theft.

Sales records show the amount of liquor sold. These amounts should be reconciled to inventory figures. If the numbers do not reconcile, then a problem exists that should be tracked down. In this case, inventories might have to be conducted daily or between shifts to isolate the problem. Exhibit 5-3 "Sample Bar Cost and Storeroom Recapitulation" is a form that is recommended by the National Restaurant Association as a means to reconcile bar sales to bar costs. Variances can be determined and investigated.

Inventory of open bottles can be conducted in several ways. The easiest and most common way is to "eyeball" the bottle, which leaves room for error. The preferred method is to use scales or rulers to measure ending inventory. Scales must be calibrated properly in order to maintain accurate counting.

COST CONTROL–"ONE OUNCE AT A TIME"

How are monies lost in the bar? The answer is "one ounce at a time"–an ounce of overpouring, spillage, a free drink, and so on. Restaurant personnel need to become aware of how profits are lost, and how they affect the bottom line. The accumulation of all the ounces "lost" through various means cuts significantly into restaurant profitability. The loss is so significant that some bar management companies are willing to install computerized bar systems in restaurants based on a percentage of money saved at the bar over a period of time.

THE PROBLEM

There are many ways for owners to lose money in their bar area. Sometimes owners are not alarmed by the loss because the additional ounce of rum costs them only 20 cents. That additional ounce, however, actually costs $3.00 or $4.00 (retail price of the drink) in lost sales revenues. If 20 ounces are lost per day, then the loss is $80 ($4 x 20 ounces) in sales revenues. On an annualized basis, the losses equal $28,800 ($80/day x 360 days) of sales revenues.

The most common control problems fall into two categories: intentional and unintentional. Intentional problems may include:

- Bartenders pocket the money and do not ring up sales.
- Employees steal bottles or do not pay for their drinks.
- Bartenders overpour drinks in hopes of receiving larger tips.
- Bartenders give away "free drinks" in hopes of larger tips.
- Bartenders bring in their own bottles, charge the customer, and pocket the money.
- Bartenders pocket the cash paid for a drink and put water in the liquor bottle to cover up the theft.
- Bartenders "taste testing" drinks or "nibbling" garnishes.

Unintentional problems may include:

- Bartenders who accidentally overpour.
- Bottles that spill or break.
- Tap beer is lost due to overflow or dirty beer glasses.
- Sales are not rung up because the bar is too busy, or customers leave without paying.

In order to limit pilferage and loss in the bar area, restaurateurs should place controls in the bar area. Some controls are very simple, such as using standardized recipes. Other controls are more sophisticated, such as installing a computerized bar management system. The sales volume of a bar will determine which means of control is the most cost effective.

There are two categories of controls that all foodservice operators can utilize in their bars. Portioning controls help prevent overpouring and sales controls discourage bartenders from pocketing money. Once the controls are implemented, they must be monitored. Bartenders are likely to stray from following the controls if they are not monitored by management.

Portioning Controls

Losses in bars may be due to overpouring. All of the following portioning controls are inexpensive and simple to implement. Following are four simple portioning controls:

Standardized Recipes. Different bartenders prepare the same drinks differently without a recipe. For that reason, all recipes must be written down with the proper glass and garnish to be used. Once recipes are written down, quantities of alcohol are regulated, and also, the quality of the drink. Customers can expect to receive the same drink every time.

Standard Glasses. The bar must be stocked with the proper glasses. Although recipes determine alcohol portioning, the drink will not look right if it is poured in the wrong glass. If glasses are not full, customers may express dissatisfaction unless bartenders top off the glass. Therefore, using the right size glasses for drinks saves alcohol costs. Standardization especially helps new bartenders prepare drinks correctly and encourages portion control by all bartenders.

Small Ice Cubes. Small ice cubes take up more volume in a glass than large ice cubes. If large cubes are used, and a drink is poured in a cup, it might not be filled. The bartender will feel the need to top off the drink or else the customer may feel cheated. To prevent this tendency, the bar should be stocked with small ice cubes.

No Free Pouring. Free pouring must be eliminated in order to implement bar controls. Even the best bartender cannot pour a perfect ounce. Several items are available on the market to ensure portion control. The simplest of them are measuring glasses called shot glasses and jiggers. Another device that can be used is a pouring spout that only allows standard portions to be poured. These can be purchased in a variety of sizes that pour from 1/2 ounce to 2 ounces. Lastly, there are computerized pourers that are placed on bottles, or computerized guns that pour liquor as programmed in the computer. This allows for exact measurement, but is substantially more expensive than shot glasses or jiggers.

SALES CONTROLS

Sales controls ensure that all sales are rung up. Some types of theft are easily discouraged, and others are not. Following are six ways to discourage sales theft:

Limit Access to Bar. Opportunities for theft must be limited. Storage areas should be locked at all times. Also, access to the bar area should be limited to authorized personnel. If an outside cleaning service is used, alcohol must be secured and/or placed in locked storage after closing hours.

Use Guest Checks for All Drinks Served. If a POS system is used, all drinks should be entered in the system. If hand-written guest checks are used, then guest checks should be audited. This sounds like an easy thing to do unless you are a bartender working during a busy shift.

When a bar becomes busy, it becomes difficult for the bartender to record all the drinks. Guests order drinks expecting instant service. Servers, too, submit drink orders for dinner guests. Often the cash register hangs open as change is quickly made to accommodate impatient guests. Other guests order drinks, put their payment on the bar, and leave the bar before receiving a bill.

Opportunity for theft or mistakes is high in these circumstances. Management must insist that all sales are recorded. One option to help alleviate these problems is to "ring up" the sale immediately after giving the drink to the customer. Allow no running tabs and require payment for each drink immediately.

Inventory should be taken no less than on a weekly, and sometimes even on a daily basis. If actual sales on the register do not meet the projected sales and inventory figures, the responsible bartender(s) must be tracked down. This can be done by isolating shifts or rotating bartenders to determine who is failing to follow control procedures or stealing.

Determine the "Pour Cost Percentage." The beverage cost percentage is known as the "pour cost percentage" in the industry. A way to use pour costs as a control device would be as follows: if the weekly pour cost for liquor is 29%, and it increases to 32%, then there probably is a control problem. Pour costs are determined by this formula:

$$\text{Pour Costs} = \frac{(\text{Cost of Beverages})}{(\text{Beverage Sales})}$$

Average pour costs for beer range from 15–18%, liquor 18–20%, and wine from 35–40%. It is a good idea to segregate the beverage costs by category: beer, liquor, and wine. Many restaurants, however, find this too time consuming and will only have one pour cost for all types of beverages. The problem with this is that the restaurant may overprice some items and meet with consumer resistance.

The average pour cost can be compared to the weekly pour cost. If there is a significant difference, further investigation can be done.

Establish a Free Drink Policy. Some restaurants allow free drinks and others do not. State liquor laws may also prohibit free drinks. Whatever the policy is, it must be straightforward and clearly stated. Some restaurants believe giving away drinks creates goodwill and promote it with limits (e.g., four free drinks per shift). Finally, free drinks must be recorded so that the pour cost percentage is not distorted.

Establish a Policy on Garnishes. It is easy for bartenders and servers to nibble on bar garnishes during their shifts. They think that the cost to the restaurant is minimal. Munching on cherries, lemons, olives, and limes, however, adds up. Foodservice operators need to remind staff not to nibble on garnishes.

Use Spotters. It is difficult to catch the "short" pour. This occurs when bartenders split the liquor for one drink between two or more drinks. Bartenders compensate for the lack of alcohol with soda, and the liquor sits on the top of the drink. Customers think the drink tastes fine, and bartenders pocket the money from the extra drink. This is difficult to catch, since inventory figures show one ounce poured and the sales report will show that one drink was rung up. The bartender easily pockets the additional drink charge without raising suspicion.

Spotters may be able to catch the "short" pour. Spotters are the "mystery shoppers" mentioned in Chapter 1. Spotters will order drinks at the establishment and watch the bartenders. Spotters can be hired from a professional firm, or can be someone familiar with restaurant bar controls. In one local restaurant chain, the corporate controller spots the bartenders. Since he works in the main office, the bartenders do not know his identity.

Although the restaurant doesn't lose revenues from the short pour (since the revenue from the sale of one drink is placed in the register), the customer is deceived. Also, the quality of the drink is diluted. Sometimes, customers will recognize a short pour and leave the restaurant unhappy. This can hurt future sales for the restaurant.

BAR MANAGEMENT SYSTEMS[1]

Computerized bar management systems are expensive. Experts say that restaurants with $200,000 or more in bar sales will benefit from a computerized system. The payback period can be as short as a few months. Computerized systems may consist of a tower or gun to dispense liquors, beers, and wines or computerized pour spouts.

[1]Mike Hyman, paper on bar management systems, Easybar Beverage Management Systems, 1995, pages 1-4. The concepts of benefits, features, and objections to bar management systems were developed from Hyman's paper.

Note: The information about Bar Management Systems was developed from interviews, demonstrations, and written information provided by Easybar Beverage Management Systems, 7017 SW McEwan Road, Lake Oswego, Oregon 97035. Phone number: (503) 624-6744.

FEATURES

The bar management system saves money by controlling portions and recording inventory to the ounce. Some features of bar management systems include:

Exact Pouring. The human hand cannot pour as accurately or consistently as computerized pumps and valves. Many bar systems have the flexibility to pour to 1/64th of an ounce. The pours are exactly the same every time. Losses due to overpouring or carelessness are eliminated.

Also, guns can be programmed to pour certain drinks. This allows owners to determine the recipes, not the bartenders. That way the quality of drinks is maintained consistently.

For example, a Long Island Ice Tea can be made with a half shot each of vodka, rum, gin, tequila, and triple sec. An owner can program the system to make the drink with a half shot of rum, gin, and triple sec, but 7/10 of an ounce of vodka and 3/10 of an ounce of tequila. The drink tastes the same prepared either way, but the savings to the restaurateur could be substantial over time because tequila costs more than vodka. This way the system can be programmed so that customers receive quality drinks with costs cut simultaneously. This is one example of the flexibility of a computerized bar system.

Finally, since every ounce is accounted for, lost drinks are controlled. This is even more important in states where free drinks are illegal. Bartenders know that if the sales in the drawer do not equal the bar management report, they will be questioned. If free drinks are given away, the bartender will have to account for them.

Speed. A computerized system can cut labor costs. A gun system can pour a multi-ingredient cocktail in seconds. Bartenders can have up to 128 brands of liquor at their finger tips with a computerized bar gun. In addition, a beer dispensing system is fast. One bartender can handle the volume that might require 2 or 3 bartenders without a computerized bar management system.

Security. Restocking is done in a secure back room that services the bar. Bottles are placed on a rack in the back room and beverages flow through lines to the bar. During slow hours, the rack can be restocked. Restricting access to bottles lessens the incidence of spillage, breakage, and theft.

Volume Purchasing. Management can purchase liquor in larger volumes that cost less per ounce. For example, purchasing 1.75 liter bottles may provide savings up to $20 to $30 per case over 1 liter bottles. Also, many vendors give volume purchasing discounts. These may vary from state to state, depending on the liquor laws.

Reporting. The reporting information from computerized systems is detailed to show exactly how many ounces are left in each bottle and in the system. It tells the projected retail sales figures per beverage dispensed. It also can give the pour cost percentage. If the sales on the POS system do not match the dispensing reports, the owner can investigate. The reports can be checked daily or even midshift. Exhibit 5-4 "Sample Inventory Control Report" is a sample report.

The report clearly indicates the amount of liquor that has been sold and how much is left in inventory. It also gives the retail figures for what has been consumed, which should be matched with sales or POS sales reports. Such comparisons highlight problems immediately.

Additional reports prepared by many bar management systems include the calculation of pouring cost percentages in total and by beverage. This would provide important control and cost information to foodservice operators.

PURCHASING A SYSTEM

There are many features to look for in a specific system. They are very similar to those used in purchasing a POS system.

- *Price and payment terms.* The price should be competitive and terms flexible. Some manufacturers will install the product at no charge, and base their collections on a percentage of the restaurant's savings.

- *Flexibility.* The system should be expandable and upgradeable. A system should be able to pour various drink sizes (for example, one ounce, 1/2 ounce) and should have the ability to pour many different types of drinks. A good system will allow for expandability to meet future needs. Also, the system should interface with a POS system if so needed.

- *Ease of use and training.* The system must be easy to use and alter. For example, how easy is it to alter the computer program and/or beverage selection on the gun. Vendors should be questioned on the training time needed to operate the system, and their support program.

- *Adjustability.* The system must be easy to recalibrate. Over time, the pour sizes need to be tested and adjusted. A good system will support easy calibration.

- *Vendor support and reputation.* Use a vendor that has a proven track record and check references. Support is essential for the installation and continued use of any system.

- *System performance and durability.* The system must be able to hold up under busy restaurant conditions. References should be called and questioned on performance and durability.

It is always a good idea to visit a restaurant where a bar management system is already installed. There are many types of systems that use different types of technology. A restaurant show is a good place to study the various types of systems on the market.

OBJECTIONS TO BAR MANAGEMENT SYSTEMS

Again, experts say that a restaurant should have beverage sales around $200,000 for the system to be cost effective. Foodservice operators mention the following concerns about computerized bar systems:

Image. Customers sometimes object to a bar management system because they think the drinks are of lower quality. This can be prevented by serving quality drinks. The system is set to pour the correct amount of liquor for a drink. Customers will be satisfied with the drinks and the consistent quality of the drinks.

Customers are becoming more comfortable with computerized systems with the advent of POS systems. In fact, customers sitting at tables will not know a computerized system is being used since they cannot see their drink being prepared.

Beverage Taste. Taste is a concern. Some beverages are better dispensed through guns and towers, and others through computerized pouring spouts placed on bottles. If the taste of a particular beverage bleeds over to other lines, then the item should be dispensed using a pouring spout. Lined tubing should be installed to help eliminate the faint taste of other brands in the tubing. In most cases, however, drinks prepared by computerized systems are of high quality.

Price. The primary objection to purchasing a bar management system is the initial investment. Systems begin at over $10,000. Easybar Beverage Management Systems developed a worksheet to help restaurateurs calculate projected savings that can be compared with the cost of a system. See Example 5-1 below.

Example 5-1: ANNUAL INCREASE IN REVENUE DUE TO BETTER CONTROL[2]

(1) Annual Sales Volume: $400,000

(2) Current Pouring Cost: 29%

(3) Projected Pouring Cost: 14%

(4) Amount spent on beverage costs: $116,000 (400,000 x 29%)
(5) If projected cost is reached you would spend: $56,000 (400,000 x 14%)
(6) Excess cost: $60,000

(7) Estimated loss at retail level 15%
(8) Rejustified Cost: $9,000 (60,000 x 15%)

(continued)

[2]Reprinted Courtesy of Easybar Beverage Management Systems, 7017 SW McEwan Road, Lake Oswego, Oregon 97035 (503/624-6744).

Example 5-1 (Continued):

(9) Actual excess costs: $51,000

(10) Revenue lost at retail level: $64,285 (9,000/14%)

(11) Total additional revenue due to cost savings and retail recovered: $115,285

(12) Average monthly saving & revenue increase $9,607

The restaurant in this example has an annual beverage sales volume of $400,000 and a current pouring cost of 29%. The projected pour cost is 14% once the system is installed.

Once these numbers are entered on lines 1, 2, and 3, then lines 4, 5, and 6 are calculated. The restaurant's cost in beverages is $116,000 (Sales x 29%). If the system were used, however, the costs would be $56,000 (Sales x 14%). That means that $60,000 was spent on alcohol that could have been saved if a bar management system were used.

This, however, does not account for the revenues lost due to underreporting of sales by bartenders. In this example, suppose that 15% of all sales are not reported by bartenders. If this is the case, the loss will be readjusted. $9,000 is the cost of the unreported sales ($60,000 x 15%). That means that the actual loss of liquor from overpouring or spillage is $51,000 ($60,000-$9,000).

If this is the case, then the amounts stolen equal $64,285 of lost sales revenue ($9,000/14%). So the savings from eliminating overpouring or spillage of $51,000 plus the additional revenue from unreported sales of $64,285 will yield an increase to net profit of $115,285.

This amount can be compared to the cost of installing a bar management system. In many cases, the payback is a few months.

If the payback is not there, then a foodservice operator can still install the standard cost and sales controls discussed earlier in the chapter.

Another way to evaluate the calculations from the worksheet is as follows. The current system's results are compared with the projected results from using a bar management system.

Current System		With Bar Management System	
Sales Volume	$400,000	Sales Volume	$400,000
		Loss regained at retail	64,285
		Total sales revenues	$464,285
Less Alcohol Costs	116,000	Less Alcohol Costs	65,000
Net Profit	$284,000	Net Profit	$399,285

The difference between the current system and the projected results is $115,285. This can then be compared with the cost of a bar management system to determine if purchasing one is cost effective. The payback period will also determine whether or not foodservice operators view the purchase as viable.

LIQUOR LIABILITY

LEGAL LIMITATIONS

Liquor liability is a major concern of most foodservice operators today. Many insurance agents will provide training and information to help restaurants limit their liability. Laws differ from state to state. For example, some states do not allow free drinks. The state liquor control office should be contacted to learn the local laws. Many laws govern the following areas:

- *Hours of service.* Often mandated by law.
- *Serving minors.* Identification must be checked for all young adults. Liquor control agents go undercover to spy on establishments.
- *Serving intoxicated persons.* A bar should stop serving intoxicated customers, take their car keys, and call a cab to take them home. Foodservice operators must take extreme care to make sure drunks do not injure themselves or others. If not, legal liability may be high.
- *Advertising. Do* not advertise to induce drinking. For example, some states prohibit advertising 2-for-1 deals because it promotes drinking. Also, in some states ads may not feature children or Santa Claus with alcohol.
- *Free Drinks.* Again, some states prohibit this since it encourages drinking.
- *Improper Conduct.* Some states limit the types of entertainment that can be in drinking establishments. For example, any establishment in Ohio with a liquor license cannot feature topless dancing.
- *Free Food.* The types of free food that can be offered are limited. Most states allow pretzels, popcorn, and nuts, but not full meals.

- *Signs.* States often require signs to be posted such as "underage warning signs" or the liquor license to be displayed.

PENALTIES

If a foodservice operation violates state law, penalties can be severe. Violations will be heard by the state commission, and the commission will decide what sanctions should be placed on the restaurant, if any. Sanctions can be monetary and/or result in a suspended or lost license.

Liquor agents can also press criminal charges that carry fines and jail sentences. Citizens can file civil liability lawsuits for millions of dollars. For example, if an intoxicated individual leaves a bar and hurts someone in a car accident, the injured individual can sue the restaurant and server. Restaurateurs and bartenders must keep this in mind when serving customers.

In order to minimize penalties and potential lawsuits, foodservice operators are encouraged to implement the following measures:

- *Training policy.* All employees need to be trained on how to deal with liquor liability issues. All new help should be trained as well as giving ongoing training to current staff.

- *Written policy.* A written policy should be established on how to handle liquor issues such as serving minors or intoxicated persons.

Breaking liquor laws or serving intoxicated individuals can result in severe penalties and lawsuits for foodservice operators. Insurance agents can be resource persons on how to implement controls to limit liquor liability. State liquor authorities can also provide useful information via mail or phone.

SUMMARY

Effective bar management can save a restaurateur 5–10% in beverage costs if implemented. Some controls, such as using standardized recipes, standard glasses, small ice cubes, and eliminating free pouring, are simple. Management should implement other controls such as reconciling sales reports with inventory usage reports. If sales do not match to inventory figures, an investigation should follow.

There are many reasons that sales reports may not match with inventory usage reports. Common problems include:

- Overpouring;

- Giving away "free drinks";

- Theft;

- Not ringing up sales, and pocketing the money; and

- Accidents, breakage, and spillage.

If not controlled, foodservice operators will lose thousands of dollars. Remember, money is lost in the bar area "an ounce at a time."

Although cost control is important, restaurateurs cannot lose sight of other bar issues. Retired bar owner Scott Lucius feels that setting up the bar properly is more important than implementing cost controls. If bartenders cannot move around the bar quickly, sales are lost. Bartenders need efficient work stations so they can prepare drinks quickly.

Computerized bar management systems might be appropriate for restaurant sales over $200,000. The systems monitor pouring, sales, and inventory. Bar information is at management's fingertips for control purposes. There is one case where all 39 bartenders quit within one week of installation at one bar. They said the system was too difficult to deal with, but actually they were all stealing.

Finally, restaurants must be knowledgeable about local liquor laws. Fines and lawsuits can be avoided if managers and bartenders care to follow the law. Restaurants with busy bar areas should consider hiring security guards or "bouncers" on busy nights. Unruly customers need to be controlled, and the other customers protected.

EXHIBIT 5-1

SAMPLE BAR REQUISITION FORM[3]

Form 10

Bar Requisition

Day ____________ Date ______________ Bar Location ____________________

List No.	Quantity	Size	Description	Unit Cost	Total Cost	Unit Sales Value	Total Sales Values

Ordered by: Issued by: Received by:

[3]Reprinted with permission of the National Restaurant Association.

EXHIBIT 5-2

SAMPLE BIN CARD

Product name: ______________________ Bottle Size: ______________

Date	In	Out	Total on hand	Auth
Beginning balance	12	—	12	—
1/2/XX	—	5	7	—
1/5/XX	7	—	12	—
	—	—	—	—
	—	—	—	—
	—	—	—	—
	—	—	—	—

EXHIBIT 5-3

SAMPLE BAR COST AND STOREROOM RECAPITULATION[4]

Form 13

Bar Cost and Storeroom Recapitulation

PERIOD

BARS	Cost of Beverage	Actual Beverage Sales	COST PER DOLLAR SALES This Period	COST PER DOLLAR SALES Last Period
FRONT BAR				
Opening Inventory	$			
Add Issues-Issues/Direct/Food				
Subtotal				
Less Closing Inventory				
Total Cost for Period	$	$	%	%
SERVICE BAR				
Opening Inventory	$			
Add Issues-Issues/Direct/Food				
Subtotal				
Less Closing Inventory				
Total Cost for Period	$	$	%	%
Total Combined Bars	$	$	%	%

STOREROOM RECAPITULATION

STOREROOM	Amount
Opening Inventory	$
Add Purchases (Storeroom only)	
Subtotal	
Less Issues: Front	
Service	
Kitchen	
Total	
Estimated Closing Inventory	
Actual Closing Inventory	
Difference	$

ADJUSTED COSTS

	Amount
Opening Inventory	$
Add: Purchases-Store	
Purchases-Direct	
Total	
Deduct:	
Closing Inventory	
Cost of Sales	$
RATIOS	
Actual	%
Estimated	%
Difference	%

[4]*Ibid.*

EXHIBIT 5-4

SAMPLE INVENTORY CONTROL REPORT

Type	Btl Size	Start Ounces	Used Ounces	Left Ounces	Inv in Tenths	Empty Bottles	Retail	Cost
Gin	750 liters	20.8	9.06	11.74	5	2	$90.85	$5.46
Vodka	750 liters	20.8	11.5	9.30	4	1	$50.00	$2.50

CHAPTER 6

LABOR MANAGEMENT

INTRODUCTION

The pool of qualified applicants from ages 16 to 24 for the foodservice industry is declining.[1] As a result, restaurants are being forced to pay higher wage levels. For example, Mike Watson, Vice President of Operations, Wendy's International Inc., has stated that the average crew wage in Columbus, Ohio, is $7.60 per hour.[2] In Columbus, it is not uncommon to see hiring signs in restaurant windows offering $8-$10 per hour.

The industry is also plagued with high employee turnover, which increases recruiting and training costs. The industry's average turnover rate for hourly workers averages over 100% and can be as high as 200%. Manager turnover averages 50%. In other words, most employees leave a restaurant within one year of hiring and managers within two years. As a result, restaurateurs are now trying to improve management practices to retain employees. Teamwork, interaction, respect, and rewards are essential for today's restaurateurs.

A critical issue affecting restaurant profitability is controlling labor costs. Labor costs are typically 25–35% of sales. Quick service labor costs are lower than those of full-service restaurants. Management must accurately forecast and schedule labor to minimize labor costs. Managers must also monitor productivity and minimize overtime pay.

Tips are the final labor issue in this chapter. Recently, the Internal Revenue Service (IRS) has taken issue with many restaurant owners on tip reporting. The IRS has set up a program to improve tip compliance called the "National Tip Rate Determination Education Program." In this program, the IRS and restaurant management come to an agreement as to the percentage of tips that must be reported by employees. If 75% of the employees report their tips at the agreed-upon percentage, the IRS promises not to conduct a payroll audit. The program has been fairly successful in the country with over 7,000 restaurants joining the program in 1995 and 1996. A court case that might hinder the success of this program in the future will be reviewed later in the chapter.

Labor issues for restaurants are numerous and complicated. "Labor in crisis" is an appropriate title to describe the labor market today. High turnover, low employee morale, and IRS aggressive pursuit of employment taxes complicate labor management. Restaurateurs must also comply with other laws

[1]National Restaurant Association, Tableservice Restaurant Trends, 1995, p. 47.
[2]Mike Watson, speech at Otterbein College, Westerville, Ohio on April 18, 2000.

such as the Fair Labor Standards Act and with OSHA regulations. Successful restaurateurs must deal with all of these issues in order to remain profitable in the long term.

LABOR IN CRISIS

The labor market is characterized by long workdays and low morale. Competition for qualified workers has increased as evidenced by foodservice operators offering higher wages. The *NRA's 1995 Operations Survey* reports a 5% increase in median wages for full service restaurants.

Foodservice operators also report that significant challenges are finding qualified employees, and training and retaining current employees. More liaisons are being made between schools and restaurants to help narrow the gap between the industry's needs and the workforce's skills.

TYPICAL RESTAURANT WORKFORCE CHARACTERISTICS

The following are several characteristics, which distinguish the restaurant workforce from the total labor pool.

Low Wages. Restaurants are not known for paying high wages. Servers are generally paid one-half of the hourly minimum wage with the difference earned in tips. Other restaurant workers such as dishwashers, cooks, and greeters are paid hourly, and not much more than minimum wage. The average wage for most hourly restaurant workers (except servers) is \$5–\$6 per hour. Factors such as unions and local cost-of-living influence wages.

Long and Non-Typical Workday. The restaurant workday is not a "9 to 5" schedule. There is no typical work schedule for all restaurants. Many full-service restaurants will open at 6 or 8 AM and close at 9 to 12 PM. Quick-serve restaurants such as McDonalds may also be open from 6 AM to 11 PM. Some restaurants remain open all night or others may be open only during lunch and dinner hours. Peak dining hours, evenings and weekends, are busy because the majority of the public does not work during those hours.

Many restaurant workers start working before opening and continue working after closing hours. Food preparation occurs before opening and cleaning and sanitation tasks occur after closing. During the afternoon, kitchen and dining room personnel will prepare for the dinner meal. Many servers take the afternoon off when work is slow and return at the dinner hour.

Restaurant managers may work 10- to 12-hour days. Many owner/managers stay at the restaurant all day long. Due to the high turnover and unreliability of the staff, restaurant managers fill in when and where needed. It is common for managers to bartend, serve, and cook. In addition, managers must schedule, manage and train staff, and monitor and control costs. It is no surprise that management turnover is 50%.

High Turnover and Low Morale. Employee turnover is shockingly high (117–140%) due to long workdays, low wages, and evening and weekend hours. The result is often low morale. Restaurant workers also tend to move from place to place looking for high pay or better working conditions.

The restaurant workforce, particularly in quick service restaurants, is young (16–24 years old). Many workers are students who often change jobs for better pay and better hours and for more experience. Also, college students tend to go home during breaks and in the summer. Eventually, students graduate and leave the foodservice industry permanently.

Here is a comparison of turnover rates for full-service and quick-service restaurants. It is interesting that manager turnover (salaried personnel) is 50% for both types of restaurants. Servers and hourly worker turnover is as high as 140% in quick-service.

TURNOVER RATES
(per the NRA)

Average check < $ 10	Average check > $10
Full-service	*Full-service*
Salaried personnel 50%	Salaried personnel 50%
Hourly personnel 117%	Hourly personnel 92%
Quick-Service	
Salaried personnel 50%	
Hourly personnel 140%	

Higher training costs, less staff continuity, and more overtime are consequences of high turnover. With average profit margins of only 5%, restaurants cannot afford the luxury of overstaffing or paying overtime.

Varying Skill Levels. Challenges in managing a restaurant include diverse levels of skills. Restaurant managers usually have some hotel/restaurant training either from a college or training program. Many servers are college students who are adept at using computers and adapt well to using POS systems. Many chefs have formal culinary training. Other workers have no formal training except for on-the-job experience. Then there are low-skill workers such as dishwashers, bussers, or cooks' helpers with minimal education.

Lower Productivity. Due to the low skill levels of some personnel, many employees suffer from low morale. Due to the temporary nature of the restaurant labor force, productivity is lower for restaurants than in other industries.

KEYS TO IMPROVING LABOR RELATIONS

In order to be successful, foodservice operators should be concerned with employee morale. Employees who care about their jobs tend to make fewer errors. For example, conscientious servers try to make sure that all food and beverage items ordered are on the guest check. Low morale, on the other hand, can lead to carelessness. For example, careless employees cost restaurants thousands by breaking dishes and throwing out flatware. Good employee morale may decrease turnover.

One key to better management is focusing on the specific needs of "Generation X." *Naked Management* by Marc Muchnich, Ph.D. is a book about motivating the X-generation at work. The book is a must for any foodservice manager dealing with a staff of 16-to-24-year-olds.

Exhibit 6-1 "Generation X" lists some of the characteristics of Generation X. In summary, X-ers do not feel as though they have much of a future to look forward to because:

- They are the first generation predicted to be financially worse off than its parents;
- They will incur tens of thousands of dollars of debt to pay for a college education; and
- Even with a college degree, there is no guarantee of obtaining a good job in the tight job market.

Generation X-ers state, however, that they can and want to be motivated. Communication, recognition, and involvement will motivate an X-er to be a productive employee. Management should consider if its management style matches X-er needs and values.

THREE "TS" TO DECREASE TURNOVER AND IMPROVE MORALE

Managers of successful restaurant chains find three key approaches to improving morale and retaining employees.

Teamwork. All employees should be treated as "equals," with appreciation and respect. Jay S. Fishman, area director for Wendy's International, states employees want:

> to be treated fairly, trained to do their job properly, thanked for a job well done, and have some fun at what they are doing and feel like part of the team. If you do this you will not have to pay the most for employees, but only to be competitive. By that I mean within 50-75 cents per hour. I have had many, many employees leave because they thought the grass was greener elsewhere. Many of them come back.[3]

Employee benefits such as health insurance, disability insurance, and stock option plans can boost morale. Employees feel valued by companies that offer benefits and stock ownership plans.

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[3]Jay S. Fishman quoted in the "Producing Profitable Results Forum," Internet, http://www.profitable.com/results/forum/labor.htm, April 6, 1996.

For example, Howard Schultz, chairman of Starbucks, the world's largest coffee house chain with over 600 stores and 12,000 employees, makes the employee his first priority and the customer second. All full-time and part-time employees are eligible for insurance, paid vacations, and stock bonus plans. Because employees are also shareholders, they are concerned with the profitability of the company. Starbuck's employee benefit plan results in less pilferage and turnover than other retail establishments.[4]

Rewards can also boost team spirit. Some rewards are monetary, such as a bonus for team or shift productivity. Other rewards can include flexible scheduling or public recognition to reward outstanding performance.

Training. Education is another key of retaining personnel and increasing morale. Training seminars and cross-training programs where employees learn each others' jobs can build camaraderie among workers.

Effective training begins with a good orientation program. Employees should be trained during the slow times of the day. They also need time to practice on the POS system (if applicable). Well-trained employees will be easier to manage than poorly trained personnel.

Managers need proper training too. They need technical training to handle computerized systems and programs. In addition, they need training in staff management. Training should be ongoing for the manager as well as for all restaurant workers.

Wendy's International has seen the importance of making employees feel valued by instituting C.A.R.E. (Critical Awareness & Retention of Employees). C.A.R.E. is a program that structures the process of giving proper attention to employees by requiring managers to take the time to sit down and get feedback from the employees.[5]

Technology. Computer technology boosts productivity and automates mundane tasks. Labor scheduling, menu analysis and planning, seat management, nutritional analysis, inventory control, purchasing, tip reporting, sales, and bookkeeping–all may be computerized. Such technology speeds up many tasks that used to be performed manually as well as promoting accuracy.

New technology will improve the quality of life for restaurant employees. Managers will be able to perform tasks such as scheduling more efficiently. Servers using a POS system will make fewer errors in billing and math. The ordering process should also be faster since orders are electronically transferred to the kitchen and/or bar areas.

Employee training is essential to implement new technologies. Once implemented, mundane employee tasks are minimized. Employees and the restaurant can then focus on other areas of employee development.

[4]Jim Morrison, *Spirit*, Southwest Airlines, "Howard's Trend," September 1995, p. 109.
[5]Jay S. Fishman quoted in the "Producing Profitable Results Forum," Internet, http://www.profitable.com/results/forum/labor.htm, April 6, 1996.

PRODUCTIVITY

Ratio analysis is useful in evaluating restaurant productivity. Ratios allow comparisons with similar establishments, industry standards, and prior periods, to highlight the restaurant's strong and weak areas. Management can investigate unusual ratios and control costs.

Labor productivity can be measured with several ratios:

Turnover Ratio. The turnover ratio is calculated as follows:

$$\text{Employee turnover rate} = \frac{\text{Number of employees that leave each year}}{\text{Number of employees in the current workforce at year-end}}$$

Variations of the same ratio would be the involuntary employee turnover rate (number of employees fired/number of employees in workforce) and voluntary employee turnover rate (number of employees that leave voluntarily/number of employees in work force).

Reducing turnover increases profitability because less company time is spent hiring and training personnel. Also, payroll taxes are lower due to the ceilings on employment taxes. Finally, experienced workers are more productive. For example, experienced servers can handle more tables than a new server.

Productivity Ratio. The productivity ratio evaluates the number of guests helped per server. Higher productivity ratios are better, as long as the quality of service is maintained.

$$\text{Productivity Ratio} = \frac{\text{Number of guests served}}{\text{Number of servers}}$$

Other Measures of Productivity. The most common measure of productivity is the labor cost percentage.

$$\text{Labor Cost Percentage} = \frac{\text{Cost of Labor + Benefits}}{\text{Sales}}$$

What goes into the "cost of labor" is up to management discretion. Some management teams leave paid vacations and sick leave out of the computation, while others leave them in. The labor cost percentage can also be calculated for the front-of-the-house (dining and bar area) and back-of-the-house (kitchen) separately to provide detailed labor information.

A weakness of the labor cost percentage is that it is labor rate sensitive.[6] For example, assume sales for Restaurant A are \$6,000 and the cost of labor is \$1,800. The labor cost percentage would be (1,800/6,000) or 30% in week 1. Then in week 2, the employees receive a 4% raise. If sales and labor

[6]Miller, Jack E., *Basic Food and Beverage Cost Control,* Wiley, 1994, p. 200.

hours remain the same, the labor cost is now \$1,872. The labor cost percentage (1,872/6,000) is now 32%.

The ratio's implication is that the employees were more productive in week 1 than week 2. This, however, is not true. The ratio's change was solely related to the raise, and not a change in productivity.

Other foodservice operators measure productivity by Sales per Labor Hour or Guests Served per Labor Hour. The formulas are:

$$\text{Sales per Labor Hour} = \frac{\text{Sales}}{\text{Labor hours used}}$$

The advantage to this ratio is that it does not vary with changes in labor rates as the labor cost percentage does. The disadvantage to this ratio is that it does not take into consideration the hourly wage paid.[7] For example, let's say two managers have the same Sales per Labor Hour ratio, but one manager pays \$5 per hour for staff help and the other pays \$7. The Sales per Labor Hour may appear the same on paper, but the manager paying the lower wage is actually getting more productivity per labor dollar out of the employees than the manager paying \$7 per hour.

$$\text{Guests per Labor Hour} = \frac{\text{Guests Served}}{\text{Labor Hours}}$$

The focus of this ratio is on the guest. This ratio highlights problems between time periods or among restaurants. If the ratio is abnormally low, managers are probably having problems with either scheduling, morale, hiring, training, or with the facilities layout. Whatever the case, further investigation is necessary.

Labor Cost Per Guest. Another ratio is the dollar expended per guest. This ratio shows the labor cost per guest. The impact of a small decrease in dollars expended per guest could have a significant effect on the bottom line.

$$\text{Labor Cost per Guest Served} = \frac{\text{Cost of labor}}{\text{Guests served}}$$

ACCURATE FORECASTING AND SCHEDULING

Poor forecasting and scheduling have negative impacts on productivity and profits. It is necessary to schedule accurately, manage personnel effectively, and minimize overtime. All labor spending must be justified, and tendencies to overstaff avoided. Labor should vary day by day since sales levels vary daily. Fridays and Saturdays may require more labor than Sunday or weekdays. In order to forecast labor accurately, the foodservice manager must consider many factors.

[7] *Ibid*, p. 203

Hours of Operation. The hours of operation should be set with restaurant profitability in mind. A change in opening and closing hours may not have a significant impact on the customers, but may significantly affect payroll costs.

Customer Counts by Hour. The customer counts allow a manager to forecast staffing needs based on anticipated sales activity. All work schedules are based on these requirements.

Staffing Needed Each Hour. Managers need to schedule workers to serve customers efficiently. Managers should anticipate crisis situations and how they will handle them. They must be prepared for no-shows or other staffing problems. Some foodservice managers use an "on-call" system. This means some off-duty staff members are available to come into work if contacted to cover for no-shows, or if activity is higher than anticipated. Other managers use an "on call" system for all their employees. All employees must call in to see if they are needed for their shifts.

A "Beat Yesterday" book serves as a daily journal in which managers record daily sales, staffing levels, weather conditions, and problems encountered. The manager may refer to the previous year's book to forecast current needs.

Staggered staffing is a way to increase productivity. Hourly customer counts facilitate management's ability to use staggered staffing. In the schedule below, note that Schedule #1 requires 4 workers, but Schedule #2 requires only 3.[8]

Staffing Schedule #1	Staffing Schedule #2
Worker 1: 8am-4pm	Worker 1: 8am-4pm
Worker 2: 8am-4pm	Worker 2: 12pm-8pm
Worker 3: 4pm-12am	Worker 3: 4pm-12am
Worker 4: 4pm-12am	

Instead of staffing with two shifts of two workers each, as in Staffing Schedule #1, the staggered approach illustrated in #2 might work better. In Schedule #2, Worker 2 works primarily during the restaurant's busy hours, and not during the slow hours which are adequately covered by Worker 1 and Worker 3.

The Productivity Ratio is higher for Staffing Schedule 2 versus 1. For example, using a customer count of 100:

Schedule #1 = 100 customers/4 servers = 25 guests per server
Schedule #2 = 100 customers/3 servers = 33 guests per server

Staggering allows a manager to schedule personnel to coincide with the rise and fall of sales throughout the day.

[8] *Ibid*, pgs. 193-194.

Overtime. Overtime is costly since it is one and a half times the current minimum wage. Restaurants also lose the benefit of the minimum wage tip credit against overtime pay. Example 6-1 demonstrates the loss of this credit.

Example 6-1:

- A server's minimum wage is $4.25 per hour. The IRS allows a tip credit of $2.12 per hour, equal to half of the minimum wage, to be applied against the $4.25 per hour. So the hourly wage paid by restaurants is $2.13 per hour.
- The IRS tip credit does not apply against overtime pay. The server overtime wage is $6.38 per hour less the regular tip credit of $2.12. The overtime minimum hourly wage for servers is $4.26 per hour ($6.38-$2.12 tip credit).

  Note: When this course was being written Congress was considering increasing the minimum wage.

With the high rate of turnover and servers quitting with little or no notice, minimizing overtime is a challenge. Staggered scheduling and the "on-call" system are two excellent ways for management to improve productivity.

Time Clocks. Time clock results must be monitored. Workers must not be allowed to inflate their working hours by clocking in a few minutes early or late. POS systems with time clocks have controls to prevent this. Also, POS systems have the capability to provide information "on demand" to managers about employees' check in and out times.

Planned Schedules. Actual results must be compared to the planned schedule. Managers should investigate why they are either over or under budget. Reasons could be due to unexpected turnover or unanticipated sales fluctuations. Without further investigation, performance cannot be improved.

COMPLIANCE WITH INTERNAL REVENUE SERVICE AND WAGE REGULATIONS

Tip reporting for restaurants is complicated. Foodservice operators must comply with the following regulations:

- Wages paid to servers must comply with the minimum wage laws.

- Servers must report their tips to their employers. If the tips are less than 8% of food and beverage sales, then tips must be allocated among the workers according to one of the IRS prescribed methods.

- Form 8027 must be filed at year-end by restaurants with more than 10 employees showing the allocation of tips.

- Restaurants can file Form 8846 making them eligible for a federal tax credit on some of the FICA payroll taxes paid on reported tips.

- Finally, restaurants can become part of the IRS National Tip Compliance program by signing a "Tip Determination Agreement."

TIP TERMINOLOGY

Tip terminology includes the following:

- *Charged Tips–tips* reported on credit card receipts.

- *Reported Tips–tips* that servers voluntarily report to management as collected.

- *Indirect Tips–tips* paid out by servers to their assistants such as bussers. The recipients of indirect tipping must also report their tips if amounts received are over $20 per month.

MINIMUM WAGE LAWS AND SERVER REPORTING

There are numerous labor laws that restaurants must comply with. First and foremost are the minimum wage laws. All enterprises with gross annual sales of $500,000 or more must pay minimum wage (currently $4.25 per hour). For tipped employees, the minimum wage can be reduced to $2.13 per hour as long as the tips bring the salary to $4.25 or above. As discussed earlier, the credit does not increase when there is overtime.

Note: Some states *override* federal minimum wages and include all employees, without volume limits. In some cases the state minimum wage is higher than the federal. It is important to check state law when considering minimum wage requirements.

Full service restaurants with tipped employees are subject to IRS tip reporting, whereas cafeterias and fast food restaurants are not. Employees making more than $20 per month in tips must report their tips to their employer. Form 4070 is the IRS form employees may use to report their tips. Form 4070-A is a summary of a month's tip activity.

Many POS systems can be programmed to track tip reporting. Before servers clock out for the day, the POS system asks them to report their tips and tips paid to others. The POS system records the date, total and charge sales per employee, cash and charge tips per employee, tips out, and prints a slip that employees sign confirming that the information is correct.

Minimum Wage and the Tip Credit. Employers must beware because they are eligible for a credit for tipped employees against the federal minimum wage. In some cases, however, an employee's tips are not enough to cover the minimum wage and the employer must make up the difference. Examples 6-2 and 6-3 show how this can work.

Example 6-2:

- Fred is a tipped employee who works 30 hours a week. Under the federal minimum wage law, he must be paid at least $127.50. His employer takes advantage of the tip credit, and most weeks pays Fred wages of just $63.60 ($2.12 x 30). As long as Fred's reported tips are at least $63.90, this is fine.

Example 6-3:

- This week, Fred's tips are only $50. His employer must make up the difference of $13.90, and pay Fred wages of $77.50. Here is the calculation:

Minimum wage ($4.25 x 30)	$127.50	$127.50
Tips credit	63.90	
"Normal wages"	$63.60	
Reported tips	50.00	
Total wages	113.60	113.60
Shortfall		13.90

To avoid minimum wage problems, Fred's employer must pay him

Wages	$ 77.50
Tips	50.00
Total wages	$127.50

Negative Paychecks. In some cases where wages are low and tips are high, a server may get a "negative" paycheck. How can this happen? Well, a server's tips may be twice as high as the employer's portion of the minimum wage which makes up the server's compensation. Once the employer calculates the FICA and federal withholding tax on the total wages and reported tips, the combined amount may be higher than the wages for the period. Example 6-4 demonstrates a "negative" paycheck.

Example 6-4:

- Mary, a cocktail server in a casino, works 20 hours a week. The wage portion of her compensation is based on $2.12 an hour times the hours worked, or $42.40. Mary is a good server, and her regular customers give her good tips. Let's say they average $200 a week. Mary's FICA tax is $242.40 x .153, or $37.09. When federal withholding tax is taken into effect, she has a negative amount due her.

In most cases, employers will zero out a negative check. The employer is not required to withhold or pay any payroll taxes in excess of the employee's wages. The *employee is* responsible for paying the additional taxes.

FORM 8027

The IRS requires restaurants to file Form 8027 if (1) tipping is customary and (2) staff size averages 10 or more employees. Employees include all dining room personnel, kitchen staff, and owners that own less than 50% of the stock.

The IRS reports, however, that many foodservice establishments are not filing Form 8027. Sometimes nonfiling is intentional, and in other situations, restaurants are misinformed or not aware of the filing requirement. The IRS also discovered that on some of the forms filed total tips reported are less than charged tips.

Form 8027 form reports tips charged for the year, total charge receipts showing charged tips, total amount of service charges of less than 10% paid as wages to employees, total tips reported by indirectly tipped employees, total tips reported by directly tipped employees, gross receipts from food or beverage operations, and the amount of tips to be allocated, and by what method.

Restaurant personnel who do not report tips equal to at least 8% of sales will be allocated tips by one of three methods: *hours worked, gross receipts,* or by *good faith agreement.* If a restaurant has 25 or more employees, it must use the gross receipts method. It is described in the Form 8027 instructions and is demonstrated in Example 6-5.

Example 6-5:

- Total restaurant sales are $150,000. Tips reported by Employees A, B, and C are $4,100, $4,400, and $2,500, respectively. Allocate tips to employees that are considered to be underreported.

Reported Tips:	
Employee A	$ 4,100
Employee B	$ 4,400
Employee C	$ 2,500
Total tips reported	$11,000
Required reporting	12,000 (8% of sales of $150,000)
Underreported	$ 1,000

- The $1,000 must be allocated to employees according to one of the prescribed IRS methods.

- Allocation according to hours worked:

- Employees A, B, and C worked a total of 4,500 hours: 1,500, 2,000, and 1,000 hours, respectively.

- The tips allocated to employees are calculated as follows:

	Hours worked	8% of Total Sales		Employee share	Tips Reported	Employee Diff.
Employee A	1,500/4,500 x	12,000	=	4,000	4,100	(100)
Employee B	2,500/4,500 x	12,000	=	5,333	4,400	933
Employee C	1,000/4,500 x	12,000	=	2,667	2,500	167
Total				12,000	11,000	1,100

- The $1,000 difference must be allocated between Employee B and Employee C. This is calculated according to their share of the total difference (shortfall) of $1,100 ($933 + $167).

- Employee B: 933/1,100 x $1,000 = $848 tips
  Employee C: 167/1,100 x $1,000 = $152 tips

- Allocation according to the gross receipts method:

- Employees A, B, and C earned total gross receipts of $150,000:$50,000,$70,000, and $30,000, respectively. The gross receipts computation is similar to the hourly computation except that gross receipts per employee is used as the allocation base.

(continued)

Example 6-5 (Continued):

	Gross Receipts per Employee		8% of sales	Employee share	Tips reported	Employee Diff.
Employee A	$50,000/$150,000	x	12,000	4,000	4,100	(100)
Employee B	$70,000/150,000	x	12,000	5,600	4,400	1,200
Employee C	$30,000/150,000	x	12,000	2,400	2,500	(100)
				$12,000	$11,000	$1,000

In this example, only Employee B underreported tips, so the $1,000 difference would be allocated solely to B. This example was simplified. It includes no indirect tips.

Note: The underreported amount is the same under both methods. This is because the amount is the difference between tips reported and 8% of sales. The only difference between the methods is how the underreported amount is assigned to employees.

The hours worked allocation method is generally unfair, since it does not reflect the revenues each person is responsible for, as opposed to the time spent. Generally, the gross receipts method is the most accurate since it is based on revenues.

Good Faith Agreement. A good faith agreement is a written allocation agreement between the employer and at least 67% of the tipped employees. The tips must approximate the actual distribution of tips among employees. If this allocation method is used, it must be attached to Form 8027.

OTHER FORM 8027 CONCERNS

The penalty for not filing Form 8027 is $50 (if unintentional). Given the high turnover in restaurants, it is easier to calculate and allocate the tips on a monthly basis.

Also, if management believes the actual tip percentage to be lower than 8%, it may petition the district director for a lower rate. For example, restaurants in college areas have been granted lower percentages since most student customers do not tip well and most tips are in cash. Cash tips are generally lower than credit card tips (approximately 2% lower).

The allocated tip amounts are put on the employees' W-2s. Employers are not required to withhold or pay FICA or FUTA on the allocated tips.

Employees and Allocated Tips

Employees who receive allocated tips on their W-2s may have to pay tax on the allocated amount. If employees have adequate records to prove their actual tips, they do not need to pay tax on the allocated tips. They only include in income additional tips that they did not report to their employer.

If employees do not have adequate records, they must fill out Form 4137 and attach it to their tax return. The unreported tip amount will be added to their taxable income, and they must pay Social Security tax on their unreported tip income.

Credit for Employer FICA Paid on Certain Employee Tips

Congress passed legislation giving restaurants a credit for FICA taxes paid on tips in excess of the minimum wage requirements under the Fair Labor Standards Act. Form 8846 is filed with the restaurant's federal income tax return. Several rules must be considered concerning the credit:

- The credit is a general business credit.
- The credit may be carried forward and backward (but not to periods before August 1993).
- The amount of the tip credit is added back into taxable income.
- The tip credit is calculated on tips in excess of those "tips" deemed wages for meeting the minimum wage requirements.
- If the restaurant is an S corporation or partnership, the tip credit flows through to the individual shareholders or partners.
- The tip credit is only available on tips received for the provision of food or beverages consumed on the restaurant's premises (e.g., pizza delivery person tips do not qualify).
- IRS assessments for FICA taxes on unreported tip income are not eligible for the tax credit.

Example 6-6 demonstrates a tip credit.

Example 6-6:

- Uncle Dan's Restaurant has one server, Jung. Jung earns $2.13 an hour, and worked 1,500 hours in 1996. Her total wage income on her W-2 including reported tips, is $9,000. Uncle Dan's Restaurant paid FICA taxes of $688.50 on the wages. What is Uncle Dan's tip credit?

Minimum wage requirement (1,500 hours x $4.25)	$6,375
Gross FICA wages	9,000
Tips in excess of reported minimum wage	$2,625
FICA percentage	7.65%
Amount of credit	200

The $200 must be added back into the restaurant's taxable income and then taken as a credit to offset the tax liability. If taxable income is $10,000 before the credit, then it would be $10,200 after the credit. If the tax rate is 15%, the tax is $1,520–$200 credit = $1,320.

NATIONAL TIP RATE DETERMINATION AGREEMENT

REQUIREMENTS FOR AN AGREEMENT

The IRS hopes to increase tip reporting compliance with their National Tip Rate Determination Education Program. Participation is voluntary. The elements are:

The restaurant and the IRS District Director agree on a tip rate. The rate is based on the restaurant's historical data. The following data are required to compute the rate:

- Total charged tips.
- Total charge receipts with charged tips.
- Tip out rates (tips paid by servers to assistants).
- Stiff factors (customers that do not tip).
- Difference between cash tip rate and charge tip rate (approximately 2%).
- Difference in shifts.
- Other unique factors.

- Hours worked.
- Gross sales subject to tipping.

The McQuatter Formula, named after a court case, uses the information above to compute the tip rate. The McQuatter Formula is shown in Exhibit 6-2.

The employer must convince at least 75% of the tipped employees to participate in the program, and the employees must sign a participation agreement. Employees must report tips at the agreed-upon rate. Employers must send non-participating employee names to the IRS each year.

In return for signing the agreement, the IRS promises not to conduct a payroll audit of the restaurant participating in the program. Also, participating employees will not be subject to tip examination.

Morrison Case

The IRS's aggressive pursuit of tip compliance has been hindered by a new district court decision. Since 1988, the IRS has assessed FICA taxes on employers for underreported tips. In late 1994, Morrison Restaurants Inc. challenged the IRS assessment procedures. Morrison argued that the enforcement policy was contrary to the Social Security Act and the employment tax provisions of the Internal Revenue Code. The employees did not receive a credit for the FICA taxes assessed nor was a determination made of earnings for each tipped employee.

The court ruled in favor of Morrison in 1995, stating that Congress did not intend for employers to police the reporting of tips or to pay FICA taxes in this manner. As a result of the ruling, some experts feel the IRS may become more flexible concerning payroll tax issues.

National organizations such as the National Restaurant Association disagree with the IRS on its assessment procedures, and have already approved $1 million to be spent on legal fees to challenge the IRS in the future.

TIP RATE ALTERNATIVE COMMITMENT (TRAC)

The Internal Revenue Service, in response to the restaurant industry and complaints from restaurateurs, developed an alternative program to TRDA. This program is the Tip Rate Alternative Commitment Program, known as TRAC. In TRAC, management agrees to educate their employees on tip reporting and require employees to report all tips. In exchange, the IRS promises not to audit the employer as long as the agreement is in effect.

TRAC does not require a tip rate to be established as in TRDA. However, employers must:

- Establish a procedure so tipped employees are provided with a written record of their charged tips.
- Establish a procedure so all directly tipped employees report their cash tips.
- Adopt a method for indirectly tipped employees to report their tips.
- Implement procedures whereby tipped employees (direct and indirect) can verify and correct their tips.

In contrast to TRDA's 75% requirement, TRAC affects 100% of employees. TRAC, however, does not require employees to sign an agreement. In addition, the employer must implement a tip reporting education program for all tipped employees and new hires.

Under TRAC, the Internal Revenue Service will conduct regular reviews to determine if the tip reporting seems reasonable. Also, restaurateurs must report gross sales receipts subject to tipping, charge receipts showing tips, total charged tips, and total reported tips to the IRS on a quarterly basis. Finally, restaurants must open their books to the IRS upon demand.

Although the IRS promises not to audit restaurants' payrolls, employees are not protected under TRAC. The IRS can audit employees, determine if underreporting exists, and bill the restaurant for its share of FICA taxes.

The IRS had an open enrollment time for TRAC until May 31,1996, where they promised to accept all applicants that were current in their payroll tax filings. Now acceptance into TRAC is conditional upon approval of the IRS.

The IRS is pushing enrollment in both TRDA and TRAC. Restaurant industry experts advise restaurants to enroll in one of the programs. Restaurateurs, however, are hesitant to enroll due to an already tight labor market. Upon enrollment, many employees quit and go to work for other restaurants.

Unfortunately, until a majority of restaurants are enrolled in the programs, restaurateurs wanting to enroll will face difficulties retaining servers. Enrolled restaurants may have to offer higher wages and better benefits to attract and retain employees.

RELATED COMPLIANCE ISSUES

There are many compliance issues related to tip reporting. State and local government units may have their own unique laws related to tip reporting (i.e., unemployment and worker's compensation).

Employee meals are another issue. Meals eaten on the premises for the employer's convenience are fully deductible for the employer and a tax-free fringe benefit for the employee. Free meals outside of working hours should be added into the employee's taxable wages and are subject to withholding taxes.

Furthermore, the cost of employee meals should be subtracted from cost of sales and added to payroll costs. The food cost ratios will not be accurate unless an adjustment for employee meals is made. Management, however, must take time to compute the cost of employee meals, and make sure the accounting entries are made to subtract them from the cost of sales figures.

The Immigration and Control Act of 1986 requires employers to verify the legal work status of any potential employees. To verify the applicant's identity and status, the employer must fill out and sign an 1-9, Employment Eligibility Verification Form.

SUMMARY

"Labor in crisis" describes the labor market today. With profit margins at only 4–5%, restaurants cannot afford to waste money on unnecessary labor costs. High turnover and low morale make it difficult for restaurateurs to manage labor effectively.

Suggestions to improve labor costs include:

- *Increase retention–careful* hiring and training of personnel will decrease employee turnover and lower labor costs.
- *Schedule accurately–managers* can use customer counts and dollar volumes to schedule hourly needs to minimize over and understaffing.
    - *No overtime–overtime* must be pre-approved and justified.
    - *Monitor the time clock–managers* should check "clock in" and "clock out" hours to ensure that employees are not paid for unauthorized labor hours.
    - *Encourage proper tip reporting–management* should encourage the proper reporting of tips and/or agree to join the National Tip Compliance Program to avoid IRS assessments.

In conclusion, managers must be properly trained to deal with many labor issues from managing "Generation X" to complying with government regulations.

EXHIBIT 6-1

GENERATION X[9]

X-er Attitudes

1) X this!

2) Wow, $4.65 per hour. That's enough for groceries and half the rent.

3) Oh, what a feeling! We're the first American generation ever predicted to do worse than our parents.

4) Forty thousand dollars worth of student debt–no problem.

5) Maybe if I jump through a few more hoops I'll get promoted to assistant fry cook.

6) Meet you in the layoff line.

7) Gee, human sacrifice is the way things get done around here.

8) Just put it on my social insecurity deduction.

9) Did you say Burger Shack was hiring?

10) Slogan "Proud to Be a Workaholic" doesn't sell anymore.

What X-ers need at Work to be Motivated
(From a survey of 1,000 X-ers)

1) Freedom and Autonomy

2) Involvement

3) Recognition

4) Empathy/Understanding

5) Communication

[9]Reprinted with permission from *Naked Management*, Copyright CRC Press, Boca Raton, Florida.

EXHIBIT 6-2

McQUATTER'S FORMULA[10]

The IRS follows a court case ruling using the McQuatter's Formula

How to compute the McQuatter's Formula:

Step 1: Determine charge and cash tip rates.

Charge tip rate = $\dfrac{\text{Total charged tips}}{\text{Total charge sales with charged tips}}$

Less: Difference between charge and cash tips

Equals: Cash tip rate

Step 2: Compute tips earned per hour

1. Gross sales subject to tipping		
2.	Less:	Stiff factor
3.		Charged sales with charged tips
4.		Other factors
5.	Equals:	Sales subject to cash tipping
6.	Multiply:	Cash tip rate
7.	Equals:	Cash tips received
8.	Add:	Charged tips
9.		Tips received from other employees
10.	Equals:	Total tips received
11.	Less:	Tip outs
12.	Equals:	Adjusted tips
13.	Divide:	Total hours worked or total sales $
14.	Equals:	Tip rates per hour or sales $

Indirectly tipped employees

Step 1: Compute tip rate per hour

Tip rate per hour = $\dfrac{\text{Tips received from other workers}}{\text{Total hours worked}}$

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CHAPTER 7

RESTAURANT INFORMATION AND RESOURCES

INTRODUCTION

The best way to learn about the restaurant industry is to join the local, state and national organizations, read restaurant periodicals, attend the trade shows, and work closely with restaurant clients. This section provides a guide as to the "how-tos" of locating information relevant to the restaurant industry.

There are seminars, organizations, periodicals, and books that summarize restaurant information. These resources are listed in this section. Also, emerging technologies are discussed in brief. The resources listed here are not all inclusive. The resources available for foodservice operators are too numerous to be listed in any one book.

Trade shows are an excellent place to examine various restaurant resources and software packages. National organizations display their books and periodicals, and software distributors show their software. Vendor support, financial stability, and reputation of the vendor need to be considered before selecting any software package.

RESOURCE GUIDE

This section will guide you through the steps needed to become acquainted with the industry.

TRADE SHOWS

Trade shows are informative and fun to attend. Shows feature hundreds of vendors and exhibits. The following two trade shows are the largest in the country, and all of the nationally known vendors have exhibits there.

- The National Restaurant Association sponsors the Restaurant, Hotel-Motel Show at the McCormick Place in Chicago, IL. The show occurs in May of each year. The cost is relatively inexpensive at $25 to attend for all four days of exhibits and $69 to attend the half-day educational seminars.

There are four full floors of exhibitors. Seminars and entertainment are provided throughout the day. Seminars cover a range of topics such as server training, menu development, hiring, and current technological issues.

There are over 1,800 exhibitors at the show, and it takes at least two days to view all of the exhibits. The trade show is a good value for the money, and there is plenty of free food and drinks for attendees to sample.

Call the National Restaurant Association at 1-201-331-5900 for more information or go to http://www.restaurant.org.

- The Hospitality and Financial Technology Professional (HFTP) sponsors the HITEC Conference (Hospitality Industry Exposition and Conference). The show occurs in late June of each year. Cost is $45 to see the exhibits for three days. To attend the educational sessions, however, the cost is $195 per day or $495 for all three days.

  Conference emphasis is on computers and technology. Educational sessions are focused on technological issues such as emerging technologies on the information super highway, the Internet, and telecommunications. The show also provides a special focus group session for CEOs and CFOs of large restaurant chains.

  Call the HFTP at 1-800-646-8347 for further information or go to http://www.iaha.org.

- Six other large shows with over 700 exhibitors:

  Northeast Foodservice and Lodging Exposition, Boston, in March. For more information, call 508-336-4144.

  Western Restaurant Show, San Francisco, in August. For more information, call 213-384-1200.

  Northwest Foodservice Show and Convention, Wilsonville, OR in April. For more information, call 800-645-7350.

  Southwest Foodservice Expo, Houston, in June. For more information, call 800-395-2872.

  Southeastern U.S. Foodservice Expo, Orlando, in September. For more information, call 305-921-6381.

  International Hotel/Motel and Restaurant Show, New York City, in November. For more information, call 847-605-1025 or go to http://www.ahma.org.

- Other shows:

  Call the NRA or your local restaurant association for further information about other shows. The NRA publishes a nationwide calendar with many of the shows in it.

TRADE SHOW HINTS

The National Restaurant Association recommends using the following steps to get the most out of the trade shows:

- Make a list of business problems to solve at the show.
- List in advance what you need to know about each product or service.
- Design a walking pattern to maximize results.
- Get to the point fast at the booths.
- Be specific when requesting information.
- Set appointments with exhibitors to spend some quality time discussing products.
- Review your notes each evening.[1]

ORGANIZATIONS

By becoming a member of the national restaurant organizations, you will gain access to useful information. Each organization provides library support and subscriptions in their membership prices.

- ***The National Restaurant Association (NRA).*** Members receive the periodical, *Restaurants USA,* and a weekly publication, *Washington Weekly.* Members also receive substantial discounts on all NRA publications. The NRA hosts the annual trade show in Chicago with thousands of exhibits. The NRA also has training materials for managers. The NRA library staff help members with inquiries. Membership fees vary depending on the size of the restaurant. Call the NRA at 800-424-5156 for further information.

- ***Hospitality Financial and Technical Professionals (HFTP).*** The HFTP provides professional development and information on trends and technology to hospitality accountants and technology professionals. The monthly periodical, called *The Bottomline,* is published by the HRTP. Certification programs for hospitality accountants are also available to members. Membership fees are $185. Call the HFTP at 800-646-8347 for information.

[1]"Getting the Most Out of a Show Visit," *Restaurants USA,* April 1994, pg. 34.

- ***State Associations.*** Each state has its own state associations. The associations provide information and seminars at a local level and can help restaurants obtain discounts on insurance plans. Many state associations host a state-wide trade show once a year. Membership dues are often based on the sales volume of the restaurant.

- ***American Culinary Federation.*** National organization with state chapters for chefs. Call 904-824-4468 for further information.

PERIODICALS

Periodicals exist covering every aspect of the restaurant industry. The following list summarizes the most popular periodicals in the industry. Specialized journals also exist covering topics such as nightclubs, bars, and pizza or pasta restaurants. Contact the NRA for specialized periodical information.

- *The Bottomline,* Hospitality Financial and Technology Professionals. Focuses on technology and the hospitality management. Excellent articles on accounting and increasing restaurant profitability. Free with HFTP membership.

- *Cheers,* Jobson Publishing Company. Periodical covering beverage management. Articles include refrigeration issues, wine sales training, and hottest beer and wine trends. To order: 800-747-1652.

- *Club Management,* Club Managers Association of America. Articles focusing on all aspects of club management including food and beverage control. Cost is $35/year. To order: 414-923-3700.

- *Hospitality Technology Edgell.* Newsletter that focuses on computers in the foodservice industry. Expert advice and reviews on point-of-sale systems, inventory and accounting software. Cost: $59.95 for bi-monthly issues. To order: 800-528-3296 or http://www.htmagazine.com.

- *Cooking for Profit, CP* Publishing. Focuses on operations management with articles on equipment and profiles on operations. Cost: $24/year. To order: 414-923-3700.

- *Cornell Quarterly,* Cornell University. Research-oriented publication concerning a variety of restaurant issues including management training, concept development, and menu design. Cost: $70/year. To order: 212-633-3950.

- *Hotels,* Cahners Publications. Magazine on the worldwide hotel industry, free to some subscribers. Cost: $75/year. To order: 800-446-6551.

- *Restaurant Business,* Bill Communications. Great articles on technology, personal computers, POS systems, credit card processing, etc. Cost: $79/year. To order: 212-592-6262.

- *Restaurant Hospitality,* Penton Publications. Articles covering many aspects of restaurant management, including how to design restaurants to conform to the American Disabilities Act or to improve service. Cost: $60/year. To order: 216-696-7000.

- *Restaurants & Institutions,* Cahners Publications. Magazine about restaurants with ample information on food preparation and recipes. Cost: $110/year. To order: 800-446-6551.

- *Restaurants USA,* National Restaurant Association. Focuses on all issues of restaurant management and foodservice. Free to members of the NRA. 800-424-5156.

Recommended Reference Books

Restaurant clients often ask for information on statistics, accounting and legal matters, and trends. The following books contain current information relating to these pertinent restaurant topics.

The Legal Problem Solver for Foodservice Operators, NRA, 1995. Book covering the labor laws governing wages, tips, child labor laws, equal employment opportunity, immigration, the Americans with Disabilities Act, and OSHA regulations.

Business Culture's Impact on Restaurant Performance, NRA, 1995. Explains the effects of the business culture on managerial style, compensation, hiring, training, and business mission.

Restaurant Industry Operations Report, 1998, NRA and Deloitte & Touche, 1998. Statistics on full service and limited service restaurants, and cafeteria. The most accurate book concerning restaurant statistics on revenues and costs.

Tableservice Trends, NRA, 1998. Booklet describing consumer trends concerning menu items, nutrition, and customer satisfaction. Other trends discussed include reservation policies, business conditions, employee issues, training, and computer usage.

Guide to Restaurants and Bars, Practitioners Publishing House, 1995. Excellent two-volume set of reference books including forms, checklists, and worksheets to help increase restaurant profitability. Good resource for CPAs who perform restaurant audits.

Uniform System of Accounts, 7th Edition, NRA, 1996. The "Bible" of restaurant accounting. A must for any CPA with restaurant clients. Explains the chart of accounts and unique income statement used by restaurants. Covers all the basics governing restaurant accounting.

For further information on books, ask for the following from the NRA:

"Catalog of Publications" NRA. Catalogue of books on industry studies, business, accounting, promotion, management, training, operations, purchasing, preparation, handling, and nutrition that are published by the NRA.

"Information Service and Library Bibliography." NRA published bibliography of books on starting a restaurant, catering, cookbooks, food and nutrition, franchising, menus, restaurant design, management, and service.

SEMINARS

Restaurant Accounting and Controls, Restaurant Seminar Institute-Seattle, WA. Hands-on seminar emphasizing cost controls and covers topics such as menu and bar pricing, inventory control, laws, and valuation. Seminar workshop includes forms that can be used in restaurant management. The seminar costs $205. Call 206-282-7909 for further information.

How to Improve Financial Management & Controls in Foodservice Operations, Center for Foodservice Education. The seminar covers accounting and reporting, food and beverage control, labor management and control, and sales and menu control. The seminar costs $195. Call 800-351-9647 for further information.

GOVERNMENT PUBLICATIONS

Publication 531–Reporting Tip Income, IRS, 2000. Discusses tip allocation, recordkeeping, and the reporting of tips.

Publication 505–Tax Withholding and Estimated Tax, IRS, 2000. Discussion of tip withholding.

EDUCATIONAL SOURCES

NRA, Educational Foundation, Chicago. Extensive management skills training program covering all aspects of restaurant management. Topics covered include administration, facilities maintenance, finance, food and beverage management, marketing, sanitation, human resources, and service. Call 800-765-2122 for further information.

American Hotel & Motel Association, Educational Institute, East Lansing, Michigan. Publisher of textbooks on hotel and restaurant operations and accounting. Many of these textbooks are used in the college curriculum. Call 800-752-4567 for more information.

COMPUTER SOFTWARE

SOFTWARE GUIDES

Thousands of computer software packages exist concerning restaurants. Several sources exist that categorize and list computer software packages.

- "Computer Software and Hardware for the Foodservice Industry: Where to Find It and How to Use It," Mike Pappas. To order: 1-800-528-3296.

  Describes software and hardware categorized as accounting, back office, bar code scanners, bar management, catering, drive thru, electronic cash registers, hand-held terminals, fixed asset accounting, healthcare, hotel/motel, inventory, menu engineering, multilingual, nutrition, payroll, paging, point-of-sale, recipe costing, scheduling, seating/reservations, timekeeping, tip allocation, and touchscreen technology.

  The names, addresses, and phone numbers of software provider companies are listed with a brief description of the software package available. A CD-ROM with more than 50 software demonstrations is included. Available November 1996.

- Software database, NRA. A list of computer applications can be ordered by members free of charge off the NRA's database. Software lists include accounting, back-office, food forecasting, timekeeping, POS, recipe costing, reservations, and scheduling to name a few.

- *Guide to Restaurants and Bars,* PPC, 1995. Appendix 13C has a restaurant equipment and software listing. Categories are separated into point-of-sale, timekeeping, bar control, bar coding, and computer applications. The types of computer applications include bakery, catering, inventory, and menu management and general ledger, nutrition, payroll, seating and reservation, and window-based systems.

  Pertinent vendor information is given including the base cost of the software, number of installations, date of the first installation, and software features.

- "Exhibit Guides" for Restaurant Shows will include vendors' names, addresses, and phone numbers, and classifications.

TIPS FOR PURCHASING SOFTWARE

Tips for purchasing software include the following:

- Evaluate restaurant needs and prioritize essential requirements.

- Identify potential vendors and initiate discussions with vendors.

- Request proposals from vendors and evaluate vendors. Serious proposals should include cost of equipment, implementation, training, and support.

- Investigate vendor references, experience, financial condition, and track records. If possible, observe the system in use at a restaurant during busy hours. Ask current users about implementation, vendor reputation, training time, and vendor support.

- Ask for a vendor demonstration. Develop a common script that can be used on each software package to compare systems. For example, practice splitting checks, voiding transactions, and modifying orders.

- Evaluate demonstrations and review reports provided by the systems.

- Select a vendor and negotiate payment terms and support.

SOFTWARE CATEGORIES

The many software packages can be confusing, but they fall into groups. Here are some of the types of software that are available.

Point of Sales Systems (POS). POS systems exist with a variety of features. Trade shows provide an excellent opportunity for interested parties to view the various systems. Many systems are industry specific. Some are better suited for quick service restaurants, and others are better for full-service. There are even some programs that are bi-lingual and designed specifically for Chinese or Arabic restaurants.

Inventory Management. Inventory management software provides control over the purchasing function, including tracking perpetual inventories, aging, and reordering.

Recipe/Formula Costing. Software providing analysis of how much menu items actually cost, and what a restaurant should charge for each menu item.

Nutritional Software. Software that helps to meet current trends regarding nutritional awareness. It determines the nutritional make up of dishes. Restaurants offering "light" menu items can add information to menus or in pamphlets concerning fat grams per dish, and other nutritional information.

Menu Analysis. Software that analyzes menu profitability and develops recipe costing. Some packages help restaurants devise menus with the food on hand. Other packages determine ordering based on the current menu. In addition, many packages include nutritional analysis.

Table Seating Management. Seating management software packages help with guest and seating management. The system will give greeters information about the status of the seated tables and the approximate times the tables should be free again. Customers can then be given a realistic wait time.

Accounting. The most commonly used software. The principal purpose of accounting software is to help managers track sales and expenses. Accounting packages can be fully integrated, including a POS system with inventory ordering, payroll reporting, menu development, and financial reporting bundled together. Nine out of ten foodservice operators report using some type of accounting package.

Management. Back-of-the-house and front-of-the-house management software is available. The back-of-the-house software will have forms on disk that the restaurant can use to write their employment policies and job descriptions. The front-of-the-house software will have restaurant policies and procedures such as the opening and closing procedures for servers, bartenders, and chefs.

EMERGING TECHNOLOGIES

Recent shows have featured some of the newest technologies available for restaurants.

The Internet. There are several restaurant-oriented Web Sites on the Internet. The National Restaurant Association has a site at http://www. restaurant. org/ which includes issues of the "Washington Weekly" and "The Foodservice Industry Forecast," current statistics, and other industry news and releases. It is a great one-stop location to read the latest in restaurant news and statistics.

Another new website devoted solely to foodservice professionals is called "Producing Profitable Results" at http://www.profitable.com/. The site is to provide foodservice operators with a forum to ask questions and give suggestions about management and cost controls issues.

The Internet can provide the following benefits to restaurateurs:

- *Increase Sales*–restaurants can put their menus (with pictures of the food items) on the Internet. Also, coupons and daily specials can be listed. Interested parties can dial-up the restaurant's web page, and check-out the latest news, coupons, and developments. Web pages can also be programmed to connect to a Fax machine. Food orders can be sent by customers directly to the restaurant and this can increase sales.

  Who will look at the information? The first to use the restaurant's website will probably be college students, business persons, and tourists. College students and many business persons are already exploring the "Net." Tourists, before arriving in an area, might browse the "Net" looking for good restaurants to dine at while in town.

- *Improve Customer Relations*–restaurants can keep in touch with customers. The "Net" serves as another means of advertising for a restaurant. E-mail about daily specials, coupons, soups, etc. can be sent to interested parties. This keeps the restaurant's name in front of the customer.

- *Cut Costs*–restaurants can order inventory through the "Net" and gather bid prices from purveyors. The information can be down- or up-loaded quickly as long as restaurant and purveyor are on the "Net." Also, advertising costs to customers are negligible. No cost for printed materials or postage is incurred to mail sent via the Net.

- *Inexpensive Resource*–foodservice operators have access to newsgroups, forums, libraries, e-mail, and an unlimited amount of information through the "Net." For approximately $49.95 per month, a restaurant can have its own web page and unlimited access to the "Net," providing low cost for potentially *high yields.* If a restaurant does not want to set up its own web page, national Web advertisers can advertise the restaurant on their web page for a nominal charge.

Computerized Guest Satisfaction Survey. The server gives guests a hand-held terminal on which they take a customer survey. The information on the terminal is downloaded to a computer once a week. The computerized surveys provide instant feedback to management about performance.

A restaurant only needs one hand-held terminal. Servers give them to customers at random. Most customers find the device amusing, and management may get about 20 survey responses an evening, providing them with valuable information about the quality of the food and service.

Hand-Held "Guest Check" Terminals. A computerized hand-held guest check terminal is an alternative to the paper guest check. The hand-held terminals allow for faster servicing of the customer since orders are sent straight to the kitchen or bar. The server does not need to write the ticket on a paper check, and then enter it into a point-of-sale terminal. The disadvantage to this type of technology is the initial monetary investment in the hand-held terminals, and possible transmission problems between the terminal and the kitchen.

Automated Ordering. Touchscreen ordering is where customers have a choice of ordering their meals via an electronic ordering "island" or with a cashier. Those customers opting for the electronic order also would pay their meal at the "island." The "island" stores customer data for future evaluation. The advantages of automated ordering are database management, faster service, shorter lines for customers, and lower labor costs. The disadvantage is the loss of the personal interaction between the customer and restaurant personnel.

APPENDIX A

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APPENDIX B

LIST OF VENDORS

Point of Sale Systems

Sable Technologies Inc.
One Waters Park Drive
Suite # 200
San Mateo, CA 94403
(415) 358-9041

MICROS Systems Inc.
12000 Baltimore Avenue
Beltsville, MD 20705
(301) 210-6000

Advanced Business Computers, Inc.
(Bilingual Chinese/English System)
4601 High Street
Suite 205
Columbus, OH 43214
(614) 268-9600

Beverage Management Systems

Easybar Beverage Management Systems
7017 SW McEwan Road
Lake Oswego, OR 97035
(503) 624-6744

Wunder-Bar
790 Eubanks Drive
Vacaville, CA 95688
(707) 448-5151

Energy Management Systems

SCES Inc.
5140 Commerce Drive
Baldwin Park, CA 91706
(800) 466-7237

UtiliCorp United
911 Main Street
Kansas City, MO 64105
(816) 467-3397

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By Nino Lama, JD
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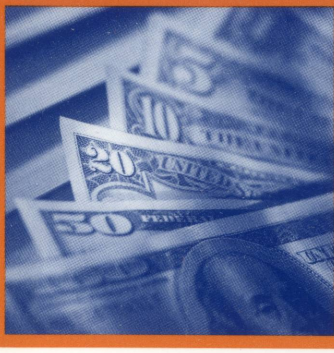
ABOUT THE AUTHOR

Marsha Huber is an associate professor of accounting at Otterbein College in Westerville, Ohio. She received her MBA from Miami University in Oxford, Ohio, and is working on her Ph.D. in food service management at the Ohio State University.

Huber received her CPA in 1984 and began consulting with restaurants in 1990. Initially, she advised franchisees with the Mark Pi Restaurants, a Chinese fast-food chain, on accounting and tax-related matters. Now, she advises both independent restaurant owners as well as franchisees for different chains in central Ohio.

Huber has written articles for several magazines and journals. She is the author of the CPE workbook *Restaurant Management Strategies*, which was published by the AICPA in 1996. She has also spoken at several conferences and to businesses including Burger King and the Ohio Society of CPAs.

Currently, Huber resides in Westerville, Ohio. She is teaching at Otterbein College, conducting research in the food service area, and consulting with restaurants. You can contact her at www.hubercpa.com or call her at (614) 895-1342.



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