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Selecting POS Systems for Table Service Restaurants

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Abstract
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Keywords
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Selecting Point-of-Sale Systems for Table Service Restaurants

by
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A point-of-sale system can enhance decision making, operational control, guest service, and revenues. However, not all POS systems offer the same features and potential for profit improvement. The author discusses those factors which are critical to POS system selection for table service restaurants.

The information era has produced a wave of technological applications, changing the way restaurants process and monitor transactions. One such application is a point-of-sale (POS) system.

Such a network of cashier and server terminals typically handles food and beverage orders, transmission of orders to the kitchen and bar, guest check settlement, timekeeping, and interactive charge posting to guest folios. POS information can also be imported to accounting and food cost/inventory software packages. A variety of reports can be generated, including open check, cashier, voids/comps, sales analysis, menu mix, server sales summary, tips, labor cost, etc.

Although POS systems are becoming more affordable, it is still perceived by many restaurant operators as a rather expensive proposition. While many claim that it can improve profitability by 20 to 60 percent with a payback of less than two years, many restaurant operators remain skeptical. Attitudes are changing, however, as POS systems become more prevalent, powerful, user-friendly, and cost effective. Their advantages over mechanical and stand alone electronic cash registers are hard to ignore:

• **Elimination of arithmetic errors:** A guest check survey conducted in 1987 revealed that handwritten checks were inaccurate 16 percent of the time; 70 percent averaged a substantial undercharge. Undercharges were brought to the restaurateur's attention 36 percent

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of the time as opposed to 91 percent for overcharges. This study concluded that restaurants using handwritten checks have lower tipping and a substantial loss of potential revenue.[1] A POS system would eliminate errors due to miscalculations; this could increase revenues up to 1.5 percent.

• **Improved guest check control:** Guest check control under manual conditions is one of the first items to be neglected. Failure to audit missing checks and to reconcile guest checks sales with cash register readings often results in a lower sales volume and higher cost ratios. With a POS system, a server must place the order through a server terminal so it is printed in the kitchen or bar. This ensures the recording of all sales and provides line cooks with legible orders. It also electronically tracks open checks, settled checks, voids, comps, discounts, and sales for each server. Consequently, sales abuses associated with manual systems are eliminated without much effort.

• **Increased average guest check:** Since orders are transmitted to the kitchen printer, travel time to the kitchen is reduced. This allows more time for suggestive selling and servicing guests. Also, a POS system provides a detailed summary for each server listing average guest check, items sold, and total sales. This information can be used for job evaluations, and motivational programs (i.e., wine contest), and assessing merchandising skills(i.e., average guest check and item sales) and server efficiency (i.e., sales per hour).

• **Faster reaction to trends:** A POS system can provide a wealth of information on a real-time basis. Most POS systems can easily track sales and cost information by time period (i.e., hourly, daily, weekly, etc.), employee, meal period, register, outlet, table, and menu item. This allows a restaurant operator to quickly spot and react to problematic areas affecting profitability such as a declining average guest check during lunch, excessive labor hours in the kitchen, a changing menu mix, or sluggish liquor sales. In the near future, POS systems will provide information on table turnover and utilization. This can be used to evaluate station sizes, dining room table mix, service style, server and kitchen efficiency, and seating and reservation policies. Unfortunately, many managers rely on profit and loss statements to judge operational performance, which tends to lay blame rather explaining where and when the mistake was made.[2]

• **Reduced labor costs:** A 140-seat South Florida restaurant with sales in excess of $4 million was using a mechanical register. Managers spent a considerable amount of time auditing guest checks, collecting dups from the kitchen to derive a sales mix and hourly cover count, and closing out the register. The implementation of a POS system eliminated much of the paperwork and resulted in a leaner management staff who refocused their efforts on guest related issues. Since cover count information is retained on a hourly basis for each

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day, managers can use this to sense changes in daily workloads (forecasting) and take the required action (managing). This will help reduce unused labor capacity. A POS system also provides the opportunity to eliminate cashier positions by assigning this responsibility to servers who carry their own personal banks.

• **Reduced credit card expenses:** A few POS vendors now offer a credit card interface. The server slides a credit card through a magnetic stripe reader attached to the terminal which automatically calls for authorization, displays approval on the screen, and produces a check to be signed by the guest. Credit card charges are transmitted at the end of each day for processing. Credit card vouchers no longer have to be batched by hand. Only one telephone line is needed to support the POS network. It eliminates bad credit cards, illegible copy, mistakes in addition, incorrect credit card numbers and tip recording. Also when the cashier is overwhelmed with too many credit card approvals, servers can carry out this task. One POS vendor is now offering clients very competitive credit card commission rates through an arrangement it negotiated with several banks.

• **Reduced late charges:** Ensuring that breakfast charges are posted to a folio before the guest checks out has been a costly problem at many hotel properties. The most effective measure in reducing late charges is to interface POS terminals in the food and beverage outlets with an automated property management system. Along with providing timely and accurate charge posting, it also checks the status of a guest's room or credit.

Terminal Design Varies

POS terminals come in different shapes and sizes. However, there are two terminal types. A server or precheck terminal is used for entering orders only, while a cashier terminal has a cash drawer. A cashier terminal, which can be used for both entering and settling checks, may support up to four cash drawers.

A terminal may consist of a display screen and keyboard, touch-screen and keyboard, or just a touch-screen. It may also have a guest check printer and a magnetic stripe reader, an input device that can retrieve data from the magnetic film strip found on the back of credit cards or employee identification cards.

For inputting orders, most POS vendors have designed wet-proof keyboard surfaces where the keys are either flat or elevated. These keys can be classified as the following:

• **Preset:** Preset keys are found on the keyboard and identified by item name or icon (i.e., press key titled "hamburger" to enter order). These keys also maintain the price.

• **Price look-up (PLU):** Due to space constraints, the keyboard provides a limited number of preset keys. To enter menu items that do

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not appear on the keyboard, enter its PLU number (i.e., enter "113" for lamb special on the numeric keypad).

• **Numeric Keypad:** This is used for entering PLU numbers and transactions requiring numeric input such as entering a server number or ordering five steaks.

• **Payment:** When settling a check, the cashier can choose from a number of payment keys (i.e., cash, Visa, etc.)

• **Cooking instructions:** These keys are used for preparation instructions to the chef that appear on the kitchen printout.

• **Hard:** These are keys that assist in processing transactions such as void and clear. Unlike the other keys, these keys cannot be reprogrammed.

There are other types of keyboards. Some POS vendors use full-screen monitors with standard personal computer keyboards, which are particularly vulnerable to water damage. One POS vendor offers an alpha entry keyboard designed for busy restaurants with a limited menu. There are no preset keys. The server enters PLU numbers or an alphabetical entry, which appears on a two-line display screen. With alpha entry, the server can type in "bou" and the system will find "bouillabaisse." The other way of inputting orders is through a touch-screen where the user can select keys by pressing the screen at the appropriate place. This second generation input option has been gaining in popularity due to its flexibility and ease of use. There are various criteria for evaluating what is best for an operation. Questions that should be asked are as follows:

• **How quickly must orders be processed?** To evaluate speed, obtain the time values associated with opening a check, adding on items, voiding items, settling the check, and capturing a credit card authorization. For most POS systems, it will take 10 to 20 keystrokes to process a typical guest check. The speed at which these keystrokes are executed primarily depends on the responsiveness of the terminal and how quickly a server can identify the required keys. Look for terminals where descriptions of PLU numbers can be quickly accessed and screen and keyboard layouts are well organized and not too crowded.

• **What system provides the most effective interaction?** When choosing a POS system, it is important to assess the user's skill level and training needs. Many feel that touch-screen systems provide a more natural interaction, making it easier to learn and use. However, the most common interface is still the keyboard, and experienced employees at a busy restaurant might prefer this. An operation with a high turnover and low literacy may find that keyboard buttons dedicat-

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ed to the icons of the various products (i.e., hamburger, fries, milkshake, etc.) provides the best interaction.[3] Terminal selection should be based on the needs and quirks of the user. Provide employees with the opportunity to experiment with the POS systems under consideration. Observe their reactions to them, perhaps administering a survey for additional feedback.

• **How are menu changes handled?** Restaurants with frequent menu changes would find touch-screens easier to manage than flat programmable keyboards, which require typed menu boards to overlay the keyboard surface for identifying the function of each key. This board must be retyped when menu items (preset key descriptions) are added, deleted, or changed. A different board may also be required for each new meal period (i.e., breakfast, lunch, and dinner). This might pose a significant problem in a 24-hour operation where meal periods overlap.

• **How many preset keys and PLU numbers are needed?** It is extremely important that the system identify every item sold. This allows the restaurateur to easily discern fast and slow-moving menu items and to differentiate between desirable and undesirable food cost items for various parts of the day. As a result, menu items with a high percent of sales and low food cost may be promoted. This information is also needed by the back office for calculating standard usages of raw goods for inventory and cost control.

• **What should the POS terminal configuration be?** Terminal placement and the number of terminals needed primarily depends on the layout of the dining area, volume of business, average length of a transaction, restaurant theme or concept, and terminal size.

The restaurant operator should locate terminals which are easily accessible to servers, minimizing travel and waiting time. A terminal can normally handle three to eight servers. A 40-seat restaurant may require only one terminal. Placing terminals in a large restaurant with several rooms requires careful planning. Vendor recommendations should be carefully considered. They have the sales-driven tendency to recommend more terminals than actually needed. If placing a terminal in a particular area is questionable, install the necessary communication cables that would allow a terminal, if needed, to be quickly brought on line. A spare terminal, for example, could be used in a banquet room that is sometimes used for Sunday brunches.

Terminal visibility or obtrusiveness is another consideration. Exposing terminals to guests may take away from the restaurant's ambiance. POS terminal dimensions vary significantly. Small terminals can be table-sunk, making them virtually transparent to the guest. Bulky terminals are difficult to conceal and are usually found around side stations and back-of-the-house areas. One POS vendor offers a flat, touch-screen terminal (17" X 11.2" X 3.4") that can be placed

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almost anywhere, including being hung from the ceiling or mounted on the wall like a picture.

Some Use Handheld Terminals

Today a few restaurants are using handheld terminals which look like a television remote control and which servers carry with them to the table. This eliminates placement and server capacity considerations, but visibility remains a factor. Handheld terminals, which were originally introduced in 1977 by David Burroughs, president of National Guest Systems Corporation, never caught on. The public did not accept them. Recent reintroduction of this product has received mixed reviews. William Schwartz, president of Systems Concepts, Inc., calls such terminals a technocrat intrusion.[4] At some restaurants, servers have been instructed to step away when punching in orders because of guest complaints.

On the other hand, Gordon Meister, director of hospitality systems for NCR Corporation, feels that handhelds can substantially improve the bottom line. Based on a NCR beta site, he cited the following benefits:

- Delivery of food is quicker, resulting in a higher average check and table turnover.
- Server has more time for servicing guests and suggestive sell ing.
- Employee morale increased because tipping increased 15 to 20 percent.
- Training time was significantly reduced.[5]

A handheld terminal can also inform the server that an item is out of stock or that an order is ready, although this task can also be accomplished through a lighting or waiter paging system. Silent (no beeper noise) paging systems are available starting as low as $595. Servers receive an unmistakable vibration when an order is ready.

In addition to guest perceptions, there may be some other drawbacks. A handheld terminal contains a battery-powered radio transmitter and receiver which sends information back and forth to the system via a radio base station. These units have been known to malfunction in hot weather or to be disrupted by other FM transmitting devices. Unit prices are also expensive, ranging from $1,500 to $4,000. Replacement costs could be high if prone to damage, theft, or being lost. There have also been problems with the recording and timing of orders.

However, wireless technology is not limited to handhelds; full-size remote keyboards or terminals have been recently introduced. Many feel that wireless POS systems will provide the maximum design and redesign flexibility.[6]

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Are Server Terminals Always Needed?

In some operations, servers never touch a terminal. The cashier is responsible for entering and settling all guest checks. According to William Schwartz, a cashier-only system offers the following advantages:

- No more than three terminals are needed for most operations, greatly reducing the hardware cost.
- Training servers to operate a POS terminal can be eliminated. Schwartz claims such training is a waste of time in a high turnover industry. This time can be spent on merchandising and service skills.
- Since there are less inexperienced users, there are fewer POS problems.
- Tighter product and cash control result.

Choosing a cashier-only POS system may be an appealing option, particularly for smaller operations (annual sales less than $1 million) with limited resources and a compact dining room layout.

Noise Level, Check Quality Are Considerations in Printers

When selecting a guest check printer, noise, speed, check and print quality, and check and printer cost must be considered. The three basic types of guest check printers are as follows:

• **Dot matrix or impact:** This printer forms text by pressing the ends of pins against a ribbon. It produces fast output in near-letter quality. However, it is noisy and could distract guests. This printer can be used on hard and paper checks. Using paper checks is substantially cheaper than hard checks, particularly bar-coded checks; 50,000 paper checks can be purchased for several hundred dollars. However, the check appearance may be unacceptable at a fine dining restaurant. To enhance the appearance of the check, it may be placed in a customized tip jacket. To improve the check quality, a high grade paper (i.e, class laid) can be used. This adds about one half cent to the cost per check. For a small cost, a logo can also be imprinted on paper checks or rolls.

• **Thermal printer:** This non-impact printer forms an image by moving a heated stylus over specially-treated paper. It is a quiet printer that requires no ribbons and produces letter-quality output. The cost of a thermal paper check is about one half cent more than a plain paper check. In addition to being flimsy, the paper also has an unpleasant, waxy feel. Some restaurants are using customized tip jackets and preprinted logos to enhance their appearance.

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• **Laser printer:** This non-impact, high-speed printer is the most expensive one. It uses a version of electro-static reproduction technology of copying machines to fuse text and graphic images to the page. It is quiet and produces the highest quality print. Typically, high grade paper is used.

In addition to guest check printers, there are work station printers. These are remote, dot matrix printers (not attached to a terminal) that produce order slips for the kitchen or bar. They use continuous roll paper and should be compact allowing them to be placed in areas that are easily accessible without occupying valuable space. Order slips should remain partially attached to each other before being separated to keep them from getting lost and out of sequence.

Order slips should be easy to read, with ample spacing between lines and clear and adequate menu descriptions (at least 16 characters) that can be read from a distance. Character size is a primary concern. A few vendors also provide machines that print orders in two colors; this is useful in highlighting preparation instructions.

The system should also inform the user when a printer problem exists. Common problems include running out of paper and printer jams. If a printer should jam, order slips and paper guest checks should be redirected to another printer. Running out of paper can be avoided if the printer is inspected for adequate paper before each meal period.

System Evaluation Begins with a Detailed Checklist

It is important to devise a detailed list of all the things a POS should do. Without clearly defining selection criteria, it will be difficult to differentiate POS products. A sample POS checklist may be found in Appendix A.

The next step is to test the POS system to validate performance capabilities and evaluate ease of use. How certain tasks are handled may make a difference in system selection. Providing more than one check per table, for example, is much easier if the system tracks orders by seat number rather than check or table number. Such a system can generate a soft check for each seat, any combination of seats, or the entire table without any additional steps and check responsibility.

It is important to investigate what systems a POS system can be interfaced with and if it is compatible with existing systems. The best POS systems can communicate data to a variety of third-party software programs (i.e., payroll, food and beverage, front office, etc.). POS systems with limited interface options should be avoided; otherwise, an operator may not be able to take advantage of applications which can reduce data entry, improve efficiency, and provide meaningful information.

The POS vendor should provide a thorough training program. Understanding how to use the system is critical to a successful installation. According to Tracey Getty, customer service manager for Micros Systems, Inc., a vendor should spend six hours with each server and

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about 10 hours with each manager.[7] The restaurant should also choose a POS system expert to learn every aspect of hardware and software operations, to be responsible for database maintenance and data back-up, to handle minor problems, to serve as a liaison between the restaurant and the vendor in solving major problems, and to retrain employees. The best training packages include "live" support after the installation; this makes the transition easier and less stressful.

Each vendor's training manuals and documentation should be reviewed to ensure they are laid out in a step-by-step fashion. Instruction manuals are good indicators of how easy it will be to operate the system. For training of future employees, the system should include a training mode where trainees can make transactions without disturbing the real database. Enabling trainees to learn the system beforehand accelerates their progress and reduces computer phobia. The availability of on-screen help also reduces training time and improves productivity.

There should be controlled access to the system, which can be achieved through passwords, electronic keylocks, or magnetic cards or keys to prevent unauthorized employees from performing supervisory tasks such as making changes to the database, opening and closing servers, adjusting checks and punch-in and punch-out times, etc. Also, the system should be safeguarded against power fluctuations and equipped with an uninterruptible power supply (UPS) where electric lines are supplied directly to the POS network from the building transformer. This minimizes electric noise in the power supply circuit which can cause garbled transactions, scrambled memory, device failures, and down time.[8]

Customer Support Is Critical

Although many POS systems are reliable, system down time and component failures will happen. It is mandatory that a restaurant purchase a maintenance agreement covering both hardware and software. This can be provided through the POS vendor or a third party service organization. References should be checked to evaluate the friendliness and responsiveness of the customer support staff and to determine if down time has been a problem.

The vendor should provide telephone customer support 24 hours per day. Some vendors use modems to diagnose problems. This device allows a technician to gain access to the system from a remote location via telephone lines, enabling a more rapid diagnosis and system recovery.

Vendors now offer several customer support options. The annual cost may vary from 5 to 15 percent of the hardware price, which primarily depends on how the hardware is serviced. Typical hardware maintenance options include the following:

- **Spare parts** which replace failed devices that are repaired and returned within a certain time period. This is the most expensive option, but minimizes downtime. This is also an appealing option for restaurants where on-site service can not be obtained within 24 hours.

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• **On-site service** within X hours, depending on the distance between the restaurant and service center. This middle-priced option is better suited for restaurants which can obtain same day service.

• **Repair of failed devices** within X hours of receipt. This is the most inexpensive option, but the restaurant may have to wait two to four days for repaired devices.

A vendor may also offer a maintenance contract with a low flat fee where the vendor and the restaurant split the cost of service calls and repairs. The annual cost may only be 3 to 5 percent of the hardware price when equipment failures are low. The maintenance contract should provide a ceiling on service fees to protect against costly system failures. The maximum annual cost should not exceed 15 percent of the hardware price.

To ensure continued customer support, it is important to select a POS vendor who is both financially stable and reputable. The age of the company, number of installations, sales projections, and past financial performance are all good indicators.

Price Is the Final Issue

Cost should not be the first consideration. This may prejudice the selection process. Instead, POS systems should be rated on hardware and software performance, customer support, vendor reputation, and training, followed by a determination of the cost of hardware, software, a software license, training and installation, a yearly customer support contract, and annual operating supplies. The final step is to compare cost to performance to determine the best value. Following these steps helps keep a perspective on the investment.

Finding the appropriate POS system is no simple task. It requires research, a needs analysis, and an evaluation instrument. Attending trade shows (i.e., NRA show in Chicago), reviewing publications (i.e., *Directory of Computer Hardware and Soft-ware for the Foodservice Industry* by Joel Chaban, and visiting restaurateurs who have installed a POS system (i.e., Remanco, NCR, Squirrel, Micros, Fisher, etc.) are helpful when developing specifications, identifying potential candidates, and verifying performance capabilities.

More and more restaurants are making the decision to install a POS system, realizing that a noncomputerized restaurant may be a noncompetitive restaurant in the near future.[9]

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References

[1]Thomas J. Kelly and Steven Carvell, "Checking the Checks: A Survey of Guest-Check Accuracy," *Cornell Quarterly*, (November 1987), pp. 63-65.

[2]Brian Sill, "In the Age of Computer Technology, Information is the Competitive Edge," *Nation's Restaurant News*, (May 22, 1989), p. 30.

[3]Dale Archibald, "Between Mind and Medium," *Training*, (May 1990), pp. 20-21.

[4]Interview with William Schwartz, president of Systems Concepts, Inc., a company which specializes in food cost management software and has conducted food cost management seminars for the National Restaurant Association since 1983, Phoenix, Arizona, July 1990.

[5]AHA Technology Conference presentation, "Handhelds - They Arrived," Gordon Meister, June 1990.

[6]Michael Kasavana, "Hardware Update,"*Restaurant Business*, (July 20, 1990), p. 71.

[7]Bill Merrick, ed., *Property Management Systems: A Guide to Implementation and Staff Training*, (Wisconsin: Magna Publications, 1989), p. 36.

[8]Michael Redlin and David Stipanuk, *Managing Hospitality Engineering Systems* (Michigan: Educational Institute, 1987), p. 103.

[9]Kathy Boyle, "Restaurant Software Comes of Age," *Restaurants USA*, (September 1987), p. 14.

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Appendix A
Pos Checklist

POS Hardware and Software

1. Provides a timekeeping function (specify how employees are clocked into the system).
2. Prevents early punch-in and late punch-out.
3. Tracks labor cost as a percentage of sales, which can be tracked hourly and broken down by job code or position.
4. Provides hourly cover counts broken down by entree and drink category.
5. Includes a wait staff paging system.
6. Capable of printing food and bar orders entered at a remote terminal.
7. Tracks information by server number.
8. Tracks the following server information:
   a. Average guest check
   b. Sales per hour and total sales
   c. Specific items sold (i.e., bottles of wine)
   d. Open checks
   e. Number of guests and tables serviced
   f. Tips
9. Revenue can be grouped according to the following:
   a. Meal period
   b. Menu item
   c. Beverage item (i.e., wine, beer, etc.)
10. Produces a cashier report listing all charge and settlement keys for reconciliation purposes.
11. Can be programmed where only supervisors do "check voids."
12. Handles multiple checks per table.
13. A table with multiple checks will appear on the same food order that is printed in kitchen.
14. Terminal screen is menu-driven, prompting the user for information.
15. Provides maitre d'/host function. Please specify functions such as reservation scheduling, seating assignment, and customer history.

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POS Hardware and Software Continued

16. User can program and change the following register keys:
    a. Item description which appears on kitchen food order and terminal screen
    b. Item location on keyboard/input device
    c. Item price
    d. Special instructions to the chef
    e. PLUs
17. Allows menu changes for breakfast, lunch, and dinner and meal periods to overlap.
18. Can print zero-priced items on the kitchen printer.
19. Kitchen printer can print server name and table number on food orders.
20. Types of checks used by the system include:
    a. Standard (hard)
    b. Bar-coded (hard)
    c. Generated by POS printer (soft)
21. Warns users if a printer is down with a screen message.
22. Tracks service times can be tracked by
    a. Time ordered
    b. Time check is paid
    c. Total service time to determine average turn
23. Transfers checks from one server to another, also denoting a change in table number.
24. Capable of assigning tables/seats to servers.
25. Allows for taxable and nontaxable status.
26. Allows different menus at different terminals to run simultaneously.
27. Specific printers can be programmed to print certain types of kitchen orders such as salads, entrees, etc.
28. Provides on-screen help and error messages.
29. Provides system security.
30. Provides protection against power fluctuations.
31. Provides data backup.
32. What is the maximum number of terminals that the network can support and the maximum number of servers that one terminal can handle?

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POS Hardware and Software Continued

33. If answer to question 5 is "yes," specify type of system.
34. If the answer is "yes" to question 6, indicate the maximum number of characters that can be used to describe an entree and drink selection.
35. How may orders be entered (i.e.,touch screen, keyboard,etc.)
36. Specify the maximum number of preset and PLUs.
37. How many kitchen printers are supported by the network?
38. If answer to question 30 is "yes," describe power protection measures.
39. If answer to question 36 is "yes," describe backup measures.

Reports

1. Reports are printed on standard size sheets.
2. Report requirements:
    a. Daily report which includes revenue and charges recap by location and operating statistics
    b. Cashier report generated for each shift
    c. Server report identifying any open checks, tips, sales, and check average
    d. Timekeeping and labor cost report(s) (give brief description)
    e. Menu item cost analysis specifies the profit margin for each menu item and total food cost percentage
    f. Menu sales mix
3. Specify other reports generated by your system.

Interfaces

1. Interfaces with a front office system (please specify). The interactive charge-post features:
    a. Posts charges directly to a guest folio
    b. Allows user to check guest room credit and room status
    c. Posts charges to house and city ledger accounts and checks status of these accounts
    d. Allows a guest check to be tendered to several rooms
    e. Will record charges that have been posted off-line
2. Interfaces with a food/bar cost system (specify).
3. Interfaces with a credit card service (specify).
4. Interfaces with a payroll program (specify).

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Explanation of form: To facilitate the collection of pertinent and meaningful information requires the conversion of system specifications into a list of detailed questions, which is sent to vendors for them to complete and return. For yes and no questions, a rating scale can be used to allow more flexibility in response. This checklist used the following rating scale: YES, satisfies system requirement, YES/MINOR, satisfies system requirement with minor modifications; YES/MAJOR, satisfies system requirement with major modifications; and NO, does not satisfy system requirement. Modifications will normally increase the system cost.

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