# Controlling Costs with Integrated F\&B Forecasting 

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Forecasting in restaurants has always been, and will probably always be, difficult. External factors such as weather, traffic conditions, economic trends and local events all help determine where a customer dines. The purpose of this article is to give you a tool that will help you forecast better-a model that integrates both "human" factors and historical probabilities by using statistics to produce a comprehensive restaurant forecast.

The restaurant we use in this model is a single meal hotel outlet; however, we can easily adapt the concept for hotels with more than one restaurant and that serve more than one meal.
In the hotel industry- especially in convention hotels-your customers can change dramatically from week to week. As the groups and in-house guests change, so does the variation in possible covers in the hotel's restaurants.

## FORECASTING METHODS

## Cover Per Occupied Room

The forecasting method that most restaurant managers use today is the "Cover per Occupied Room" (CPOR) statistic. This approach allows the manager to keep track of the number of covers served in comparison to occupied rooms, yielding a "multiplier" that the outlet manager can use to forecast covers for the coming week. However, this method does not consider multiple occupancy or the activities of the in-house groups. It also does not respond quickly to in-house group characteristics. Since room forecasts in a hotel can change significantly in a single day, forecasting for the coming week will not be accurate.

## The Capture Ratio

A better forecasting statistic is the "Capture Ratio"-the number of covers for a meal period divided by the available guests. This model assumes that the restaurant will have an accurate method for counting daily covers per meal. We calculate the available guest statistic by taking the number of guests in-house and subtracting guests in banquet functions, as well as guests who are part of a group that we know is going off property to dine. We add any non-guests who we know will be dining at the hotel or who will be available to dine during that meal period. The result is the number of people who are available to eat in the restaurant during a given meal period. (See Figure 1) This eliminates the variances that result from multiple occupancy and large banquet
activities. Figure 2 illustrates the differences in the forecasting outcomes using the "Cover Per Occupied Room" statistic as opposed to the "Capture Ratio" statistic.

The "Capture Ratio" makes it easy to forecast by keeping all things relative. In the data shown in Figure 2, we can see two pictures very much alike. However, without examining the activities of the inhouse groups, the process can lead to bad forecasting. The "Capture Ratio" is always changing-as the type of business changes, so will this statistic. For example, during slow times, hotels tend to lower room rates, resulting in a changing clientele. Also, the probability that they will eat in the hotel's restaurants also changes.

## The Moving Average

To further smooth the forecasting peaks and valleys, we can use a statistical tool called the moving average. When determining the size of the moving average there are three things we need to consider. First, if the model is too small it can be skewed by a peak in the data (an unusually high or low number in the data that will not be repeated). When using statistics and averages, one very large or very small number can skew the forecast in that direction. Here's an example:

A large party comes into the restaurant from off-property to celebrate a birthday party. Since this is an unusual activity that will probably not happen again during the forecasting period, the calculated Capture Ratio for that day appears higher than it should be. This unusual peak will skew

all of the forecast numbers higher.
A way to compensate for this is to increase the size of the moving average. With the larger number considered in the average, the Capture Ratio is less likely to be skewed. However, we have to make sure that the model is not too large, or it will not respond quickly to changes in guest characteristics; thus, increasing the risk of error.

The third factor to consider when determining the size of the moving average model is the hotel's average length of stay. A hotel that has a short average stay should use a shorter moving average, or the model will respond too slowly as the hotel turns the guest rooms over. The typical moving average is equal to twice the average length of stay. This is usually a good place to start since it can be adjusted by comparing the hotel's forecast to the actual covers served over a period of time.

This method is limited because the model is small, making it somewhat susceptible to peaks and skewed data. However it does have advantages. It is more reactive than most statistics, which leads to more efficient staffing and more accu-
rate purchasing. It also considers local patronage, which the "Covers Per Occupied Room" method does not. If the number of locals who dine in the restaurant is the same each day, then it is considered in the CPOR statistic by default and is not a problem. However, if local diners come in only on Friday and Saturday night, they will not be considered in the statistic, and the forecast for these two nights will be lower than the actual covers served. The remaining five days will be just slightly higher than the actual count. The "Capture Ratio," on the other hand, accounts for local patronage, including the number of non-guests on property for the meal period. There are many factors that make it impossible to forecast all customer preferences, so there is always some uncertainty in any forecast. Our goal, however, is to minimize this as much as we can.

Once we have forecasted the covers, the estimated number can be used to prepare another forecast, further enhancing our ability to manage the restaurant. By incorporating the covers forecast with the sales abstracts, the forecast can provide information to the kitchen to help them
staff and purchase more efficiently. Using the same moving average theory, sales abstracts can be kept, and a statistic called "Quantity of Items Sold per Cover"(QISC) can be calculated. (See Figure 3) Thus, when the total covers forecast is complete, it can be fed into the abstract, and a potential sales abstract for the day computed. The number of days incorporated into this second moving average should be small enough to react to the in-house guest preferences and large enough to avoid skewed data. We can see the benefits of calculating the QISC in the following example.

The restaurant manager tells the kitchen staff that there will be 200 covers for breakfast, but does not tell them that many of these guests are athletes participating in a large track and field event. Unaware of who the guests are, the chef plans the meal based on the standard daily breakfast orders. Because of the large amount of food the athletes eat as well as the types of food they consume, the restaurant runs out of many items, losing sales. If the sales abstracts had been integrated with the forecast, the kitchen would have been able to change supply orders and food
preparation procedures to prepare for the large amount of fruit plates and no-cholesterol eggs that this group ordered.

Once we have projected the sales mix, we can figure unit cost and price into the forecast. These calculations give the manager financial benchmarks to determine the restaurant's revenue and sales' costs. (See Figure 4) They can also help him compare the actual cost of sales with what the potential should have been. This will help him find and correct problems before they affect the financial statements.

We have now forecasted total revenue and dinner count and are ready to incorporate the staffing information into the forecast. Many restaurants schedule their staff according to covers and use statistics such as "Man-Hours Per Cover." While it is true that cover counts should play a part in the staffing guidelines, it is not the only factor we should consider as we can see from the following example.

The restaurant forecast is for 260 covers. Based on the average "Man-Hours per Cover," the manager allocates 190 man-hours, which is estimated to cost $\$ 295$. If the restaurant sells 260 covers with an average check of $\$ 5.00$, this allocation will be a 22.7 percent payroll cost. On the other hand, if the average check is $\$ 3.00$, it will be a 37.8 percent cost.

Policies that estimate payroll based on man-hours per cover, or as variance from forecast, have been outdated for some time. You have to consider the projected revenue and estimate payroll as a percent of sales. When you prepare your staffing guidelines, you should make sure they take into account minimum and maximum requirements. However, in the end you must judge them against your sales. The method we describe in this model gives you a percentage of anticipated sales to use as a staffing guide, which gives you some scheduling leeway. For example, you may decide to save the $\$ 6.50$ per hour for a hostess and seat people yourself, using hostess dollars to pay for three more servers. You should develop staffing guidelines as a predetermined benchmark on which to base the staffing schedule. Figure 5 illustrates sample guidelines.

## Electronic Spreadsheets

Even with a limited menu in a slow restaurant, the calculations we have discussed can become quite cumbersome, taking hours to prepare manually. They are ideally suited to an electronic spreadsheet program on a personal computer. By using a product such as Lotus 1-2-3, you can change a two-hour operation into a five-minute project. Electronic spreadsheets were designed to take figures and

Figure 1

## Capture Ratio Calculations

Number of Guests In-House
Less Guests in Banquet Functions
$\frac{\text { Less Guests Part of Groups Going Off Property }}{=}$
Plus Non-Guests Available to Eat
$=$ Number of Persons Who Are Available to Eat That Meal
Capture Ratio $=\frac{\text { Meal Period Covers Served }}{\text { Number of Persons Available to Eat that Meal }}$

Figure 2
Cover per Occupied Room vs. Capture Ratio

|  | $\frac{\text { Day 1 }}{200}$ | $\frac{\text { Day 2 }}{200}$ |
| :--- | :---: | :---: |
| Occupied Rooms | 600 | 800 |
| In-Houst Guests | 0 | 500 |
| Guests in Banquet Functions | 600 | 300 |
| Available Guests | 60 | 30 |
| Covers | .30 | .15 |
| C.P.O.R. | .10 | .10 |

This example reflects only one of the adjusting factors previously noted; yet, there has been a substantial smoothing effect on the forecasting outcome.

Figure 3
Quantity of Items Sold per Cover (OISC)

QISC $=$
Quantity of Item Sold
Meal Period Covers
This calculation will result in a multiplier that can be multiplied by forecasted covers to predict the quantity of menu items that will be orderd.

Figure 4
Financial Benchmarks for Management
$\mathrm{TC}=\Sigma(\mathrm{QISC} \times \mathrm{PC} X \mathrm{IC}))$
$T R=\Sigma$ (QISC X PC X IP)
TC
Potential Cost $\%=\mathrm{TR}$
$\Sigma \quad=\quad$ The summation of All
$\mathrm{TC}=$ Total Projected Cost
$\mathrm{TR}=$ Total Projected Revenue
QISC $=\quad$ Quantity of Items Sold per Cover
$\mathrm{PC}=$ Projected Covers
IC $=$ Menu Item Cost
$\mathrm{IP}=$ Menu Item Price

## Staffing Guidelines with Payrolll Calculated as a Percent of Revenue

## ALL-DAY DINING ROOM PAYROLL CRITERIA BREAKFAST

| Covers | Revenue | Payroll | Percentage |
| :---: | :---: | :---: | :---: |
| 0 | \$0.00 | \$20.00 | N/A |
| 8 | \$50.00 | \$20.00 | 40.0\% |
| 17 | \$100.00 | \$22.26 | 22.3\% |
| 25 | \$150.00 | \$33.20 | 22.1\% |
| 34 | \$200.00 | \$44.00 | 22.0\% |
| 42 | \$250.00 | \$54.69 | 21.9\% |
| 50 | \$300.00 | \$65.25 | 21.8\% |
| 59 | \$350.00 | \$75.69 | 21.6\% |
| 67 | \$400.00 | \$86.01 | 21.5\% |
| 75 | \$450.00 | \$96.21 | 21.4\% |
| 84 | \$500.00 | \$106.30 | 21.3\% |
| 92 | \$550.00 | \$116.28 | 21.1\% |
| 101 | \$600.00 | \$126.15 | 21.0\% |
| 109 | \$650.00 | \$135.90 | 20.9\% |
| 117 | \$700.00 | \$145.55 | 20.8\% |
| 126 | \$750.00 | \$155.10 | 20.7\% |
| 134 | \$800.00 | \$164.54 | 20.6\% |
| 142 | \$850.00 | \$173.88 | 20.5\% |
| 151 | \$900.00 | \$183.12 | 20.3\% |
| 159 | \$950.00 | \$192.26 | 20.2\% |
| 168 | \$1,000.00 | \$201.30 | 20.1\% |
| 176 | \$1,050.00 | \$210.25 | 20.0\% |
| 184 | \$1,100.00 | \$219.10 | 19.9\% |
| 193 | \$1,150.00 | \$227.86 | 19.8\% |
| 201 | \$1,200.00 | \$236.53 | 19.7\% |
| 209 | \$1,250.00 | \$245.11 | 19.6\% |
| 218 | \$1,300.00 | \$253.60 | 19.5\% |
| 226 | \$1,350.00 | \$262.00 | 19.4\% |
| 235 | \$1,400.00 | \$270.32 | 19.3\% |
| 243 | \$1,450.00 | \$278.56 | 19.2\% |
| 251 | \$1,500.00 | \$286.71 | 19.1\% |
| 260 | \$1,550.00 | \$294.77 | 19.0\% |
| 268 | \$1,600.00 | \$302.76 | 18.9\% |
| 277 | \$1,650.00 | \$310.67 | 18.8\% |
| 285 | \$1,700.00 | \$318.50 | 18.7\% |
| 293 | \$1,750.00 | \$326.25 | 18.6\% |
| 302 | \$1,800.00 | \$333.93 | 18.6\% |
| 310 | \$1,850.00 | \$341.53 | 18.5\% |
| 318 | \$1,900.00 | \$349.06 | 18.4\% |
| 327 | \$1,950.00 | \$356.52 | 18.3\% |
| 335 | \$2,000.00 | \$363.90 | 18.2\% |
| 344 | \$2,050.00 | \$371.21 | 18.1\% |
| 352 | \$2,100.00 | \$378.46 | 18.0\% |

perform the recalculations associated with this type of forecast. The model we describe here, which will calculate all the statistics we have discussed, was constructed using Lotus 1-2-3 version 2.0. It takes approximately one hour to set up the model and about 15 minutes per day to maintain it and produce reports.

We designed the first worksheet (Figure 6) to calculate "Available Guests." Across the top, "Days" are listed in the following format.
$\left(\begin{array}{llllllllll}-8 & -7 & -6 & -5 & -4 & -3 & -2 & -1 & 0 & +1\end{array}+2\right)$
This heading shows how old the data is (Data found under the " -8 " is eight days old.) Every day you enter the previous days actual under the column marked " 0 ." You then roll the forecast, which means that all the figures in days " -7 " to day " +2 " shift one column to the left. You complete this movement by using the copy command. Once the forecast has been rolled, you update the forecast for day " 0 " (Today) and the next two days. The only number that needs to be under day " -8 " is "In-House Guests," which is the number used to calculate persons available for breakfast on day "-7."

You calculate dinner by using the available guests from the same day as that meal period. Calculate lunch by using either the guests from the same day or the previous day, depending on the guest arrivals and departures pattern.

For example, if the majority of guests check out late, then you should probably use the previous day's available guests. However if guests tend to arrive early in the afternoon, then you should use the number of present day in-house guests. Either of these numbers or a combination is acceptable. It depends upon the characteristics of your hotel.

Figure 7 illustrates the worksheet for a meal period "Sales Abstract and Statistics" page, which can be replicated for multiple meal periods. It works a great deal like the first model. In the model, day " 0 " normally has formulas in the cells. However, you will enter values over those formulas and then roll the forecast. The forecast rolls from the right to the left with all the figures from "Day 0" to "Day -6" moving one column. You should keep a blank copy of "Day 0 " with all the formulas intact on the side of the worksheet and replace it over the "Day 0 " when the roll has occurred. The program will then analyze the number of available guests for that meal period, calculate a weighted average "Capture Ratio" for the past seven days, and project the "Capture Ratio" for the current day as well as the next two days. Once you have forecasted the cov-
ers, the model will calculate an average number of items per cover, and project the quantity of items for the three days. You then multiply item cost and price by the projected sales abstracts. You extend individual item costs and revenues for the entire meal period. This gives the potential sales cost and projected revenue that you should base your scheduling on.

As we previously noted, Figure 5 contains a predetermined payroll criteria. By formulating these guidelines in a worksheet, the model can look at the daily revenue and covers and extrapolate the proper payroll dollars and sales percent. By making this chart available, you have more control over payrolls during each shift. Look at the following example.

During a shift the manager notices that the restaurant has only taken in \$500 and predicts that it will take in another $\$ 550$ before the shift ends. He can look at the chart and see that for this anticipated $\$ 1,050$ revenue, the payroll cost should be $\$ 210.25$. Real numbers are brought under the manager's control, and he can adjust the shift's schedule as needed.

You can also use these guidelines to review revenue and payroll expenses. At the end of the day, you can see any variances to your forecasted figures and can then look back over your day to determine why they occurred.

Once you have calculated all this information, develop your managerial reports. These must be easy to read and understand if they are going to be effective. As a restaurant manager, you should get two reports. The first (Figure 8) should contain information about Forecasted Revenue, Covers, Average Check, Payroll and Food Cost for the next three days. With a three-day forecast, you will have enough time to change a schedule to meet any unforeseen changes in the number or type of available guests. The second report (Figure 9) should have the projected sales abstracts for the next three days. This allows the kitchen manager to be able to increase or decrease orders to meet the guests' anticipated needs. The report will also give the kitchen manager ample time to revise schedules based on the different types of items being ordered.

For example, if guests want a lot of fruit plates, the kitchen manager, to save payroll costs, may decide to have extras made up ahead of time, keep them wrapped in the refrigerator and send cooks home early.

Forecasting is very important, but must not become just another managerial task. It requires careful thinking to develop accurate figures. It also requires good communication with your key personnel

| Figure 6 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Worksheet to Calculate Persons Available per Meal |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | PUT |  |
| Day | -8 | -7 | -6 | -5 | -4 | -3- | -2 | -1 | 0 | +1 | +2 |
| In-House Guest | 765 | 954 | 1234 | 852 | 792 | 921 | 1200 | 1120 | 693 | 712 | 847 |
| Guests in Banquets Bfst. | XXX | 75 | 335 | 412 | 105 | 600 | 90 | 90 | 90 | 85 | 60 |
| Guests off Property Bfst. | XXX | 100 | 0 | 0 | 25 | 0 | 160 | 160 | 160 | 140 | 110 |
| Non-Guests on Prop. Bfst | XXX | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Available for Bfst . | XxX | 590 | 619 | 922 | 722 | 192 | 671 | 950 | 870 | 468 | 542 |
| Guests in Banquets Lunch | XXX | 56 | 251 | 309 | 79 | 450 | 68 | 68 | 68 | 70 | 90 |
| Guests off Prop. Lunch | XXX | 100 | 0 | 0 | 25 | 0 | 120 | 120 | 120 | 50 | 30 |
| Non-Guests on Prop. Lunch | XXX | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Available for Lunch | XXX | 798 | 983 | 643 | 688 | 471 | 1012 | 932 | 505 | 592 | 727 |
| Guests in Banquets Din. | XXX | 293 | 379 | 262 | 243 | 283 | 269 | 269 | 269 | 250 | 265 |
| Guests off Property Din. | XXX | 0 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Non-Guests on Prop. Din. | XXX | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 |
| Available for Din. | XXX | 661 | 655 | 590 | 649 | 638 | 931 | 851 | 424 | 462 | 582 |

Figure 8

## Three-Day Manager's Forecast Report

Breakfast Restaurant
Three-Day Forecast

|  | Today | Day +1 | Day +2 |
| :--- | :---: | :---: | :---: |
| Revenue | $\$ 1,860.00$ | $\$ 1,000.00$ | $\$ 1,159.00$ |
| Covers | 312 | 168 | 194 |
| Capture \% | $35.8 \%$ | $35.8 \%$ | $35.8 \%$ |
| Average Check | $\$ 5.97$ | $\$ 5.97$ | $\$ 5.97$ |
| Payroll | $\$ 341.53$ | $\$ 201.30$ | $\$ 227.86$ |
| Food Cost \% | $25.9 \%$ | $25.9 \%$ | $25.9 \%$ |

to make sure that the right action is taken based upon the information provided. In the model presented, we recommend that you update the rolling forecast daily. This will save money, not only in payroll costs and sales costs but, most important, in guest satisfaction. Below is a good example.

A group of meeting planners, grounded at the airport, checked into a hotel. Since he was not aware that the guests were inhouse, the manager did not revise the forecast. As a result, he did not bring in enough staff, and the guests had slow service. The kitchen ran out of supplies, and the guests did not enjoy their meal. If problems such as this happen over and over, your long-term business will certainly suffer.

## Macros

You can increase the speed of the forecasting model on an electronic spreadsheet program by using macros-programs written in the spreadsheet that uses the program's own commands to perform
the functions you want. The best use of the macros is for any process that is performed the same way over and over again. By incorporating macros into the model, you can shorten the forecast rolls and the printing functions to a single keystroke. We used only two macros for this model; both are shown in Figure 10. The first, Alt-C, is used to move the rolling forecast. Notice that the macro is simply the same keystrokes that we would use if we did this process manually. The second macro, Alt-P, is designed to print all the pages of the worksheet. This would normally take just three minutes with just a few key strokes. Still, when it can be incorporated into a macro where only one keystroke is needed, it becomes a very attractive tool. You can design macros to perform many different tasks in the forecasting process and can make them as long or as short as you need to.

## Implementation

The Stouffer Orlando Resort has implemented a larger scale (Continued on page 27)

| Figure 7 <br> Worksheet for Sales Abstracts and Statistics for One Meal Period |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All-Day Dining Room Breakfast Restaurant Sales Abstract and Statistics |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & \text { Menu Item/ } \\ & \text { Day } \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Covers 200 242 283 268 74 240 365 312 168 194 <br> Capture $\%$ $33.9 \%$ $39.1 \%$ $30.7 \%$ $37.1 \%$ $38.5 \%$ $35.8 \%$ $38.4 \%$ $35.8 \%$ $35.8 \%$ $35.8 \%$ |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{llllllllllll}\text { 1 Egg } & 140 & 123 & 130 & 201 & 290 & 146 & 130 & 216 & 116 & 135\end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{llllllllll}\text { 2 Eggs } & 10 & 7 & 11 & 16 & 20 & 12 & 10 & 16 & \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{lllllllllll}\text { Bacon } & 100 & 85 & 97 & 153 & 210 & 104 & 96 & 158 & 85 & 98\end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{lllllllllll}\text { Bagel } & 47 & 45 & 49 & 75 & 105 & 57 & 51 & 80 & 43 & 50\end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{llllllllllll}\text { Coffee } & 240 & 202 & 235 & 371 & 501 & 255 & 239 & 381 & 205 & 237\end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| French Toast |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{llllllllll}\text { Ham } & 20 & 18 & 20 & 31 & 41 & 23 & 21 & 32 & 17\end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{lllllllllll}\text { Milk } & 21 & 18 & 19 & 32 & 43 & 22 & 21 & 33 & 18 & \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{llllllllll}\text { Muffins } & 61 & 49 & 60 & 95 & 124 & 65 & 60 & 96 & 52\end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{lllllll}\text { Omelette } & 5 & 5 & 4 & 8 & 11\end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{lllllllllll}\text { Orange Juice } & 191 & 160 & 185 & 297 & 394 & 202 & 187 & 301 & 162 & 188\end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Pancakes |  |  |  |  |  |  |  |  |  |  |  |  |
| Steak \& Eggs |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{llllllllllll}\text { Toast } & 120 & 100 & 115 & 185 & 250 & 128 & 120 & 190 & 102 & 118\end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{llllllllllll}\text { Waffels } & 3 & 2 & 3 & 3 & 7 & 3 & \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Menu Item | Item Cost | Item Price | Item Cost\% | Today Cost |  | Today Revenue |  | Day+1 Cost |  | Day+1 <br> Revenue | $\begin{gathered} \text { Day+2 } \\ \text { Cost } \end{gathered}$ | Day+2 <br> Revenue |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{lllllllllll}\text { 1 Egg } & \$ 0.47 & \$ 1.25 & 37.6 \% & \$ 101.66 & \$ 270.36 & \$ 54.68 & \$ 145.44 & \$ 63.33 & \$ 168.43\end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{llllllllll}2 \text { Eggs } & \$ 0.52 & \$ 1.75 & 29.7 \% & \$ 8.34 & \$ 28.06 & \$ 4.49 & \$ 15.10 & \$ 5.19 & \$ 17.48\end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{llllllllll}\text { Bacon } & \$ 0.61 & \$ 1.75 & 34.9 \% & \$ 96.11 & \$ 275.72 & \$ 51.70 & \$ 148.32 & \$ 59.87 & \$ 171.77\end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{lllllllll}\text { Bagel } & \$ 0.32 & \$ 1.00 & 32.0 \% & \$ 25.60 & \$ 79.99 & \$ 13.77 & \$ 43.03 & \$ 15.95\end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{llllllllll}\text { Coffee } & \$ 0.27 & \$ 1.00 & 27.0 \% & \$ 102.85 & \$ 380.93 & \$ 55.33 & \$ 204.91 & \$ 64.07 & \$ 237.31\end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{llllllllll}\text { French Toast } & \$ 1.06 & \$ 3.25 & 32.6 \% & \$ 7.71 & \$ 23.63 & \$ 4.15 & \$ 12.71 & \$ 4.80 & \$ 14.72\end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{lllllllll}\text { Ham } & \$ 0.35 & \$ 1.00 & 35.0 \% & \$ 11.36 & \$ 32.44 & \$ 6.11 & \$ 17.45 & \$ 7.07\end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{llllllllll}\text { Milk } & \$ 0.22 & \$ 0.95 & 23.2 \% & \$ 7.22 & \$ 31.18 & \$ 3.88 & \$ 16.77 & \$ 4.50 & \$ 19.42\end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{lllllllll}\text { Muffins } & \$ 0.31 & \$ 1.25 & 24.8 \% & \$ 29.71 & \$ 119.80 & \$ 15.98 & \$ 64.44 & \$ 18.51\end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{lllllllll}\text { Omelette } & \$ 0.79 & \$ 3.50 & 22.6 \% & \$ 6.19 & \$ 27.41 & \$ 3.33 & \$ 14.74 & \$ 3.85 \\ \text { On }\end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{lllllllll}\text { Orange Juice } & \$ 0.15 & \$ 1.25 & 12.0 \% & \$ 45.20 & \$ 376.64 & \$ 24.31 & \$ 202.61 & \$ 28.16\end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{llllllllllll}\text { Pancakes } & \$ 1.09 & \$ 3.50 & 31.1 \% & \$ 5.28 & \$ 16.97 & \$ 2.84 & \$ & 9.13 & \$ 3.29 & \$ 10.57\end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{lllllllllllllll}\text { Steak \& Eggs } & \$ 1.75 & \$ 4.50 & 38.9 \% & \$ 0.65 & \$ 1.68 & \$ 0.35 & \$ 0.90 & \$ 0.41 & \$ 1.05\end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Toast <br> Waffels | \$0.15 | \$0.95 | 15.8\% | \$ 28.47 |  | \$180.32 |  | \$ 15.32 |  | \$ 97.00 | \$17.74 | \$112.34 |
|  | \$1.15 | \$3.25 | 35.4\% | \$ 5.15 |  | \$ 14.54 |  | \$ 2.77 |  | \$ 7.82 | \$ 3.21 | \$ 9.06 |
|  | Total Revenue |  |  | \$1,859.67 |  |  |  |  |  | \$1,000.37 |  | \$1,158.55 |
|  | Potential Food Cost$\%$ |  |  |  | \$ 481.48$25.9 \%$ |  |  |  |  | \$ 259.00 |  | \$ 299.96 |
|  |  |  |  |  | 25.9\% |  | 25.9\% |

## Controlling Costs

(Continued from page 20)

of this model, which has been very accurate and useful. Its success at the Stouffer is largely the result of the quality of the information shared among the managers using this model. The sales, catering and restaurant managers work closely together, communicating information about group activities, group preferences, as well as any known group tendencies. Most group coordinators want to share this information with the hotel because they know that the more we know about the group, the better we can serve it.

The second reason for the model's success is our policy for each restaurant manager to run the restaurant as if it were his/her own. Managers take pride in giving guest satisfaction and running an efficient operation. The third reason for the success is that the forecast is compiled daily, and is not prepared by just one manager. It is made with the help of all the restaurant managers-all taking part in the process. This makes them all feel more confident about the outcome. When people are part of a process they do more to support the ideas and figures established by that process. The forecast at Stouffer has an annual variance of less than 5 percent from actual. When peaks do occur, managers discuss and account for these variances, thus minimizing their impact.

When you follow these steps and review and modify the forecast, you can achieve significant savings in sales and labor costs. Guest satisfaction increases which adds to your future sales potential. Since the program was developed at Stouffer's in March of 1988, we have achieved almost a two percent savings in sales' costs. The kitchen is more efficient and guest service has gotten faster. Our labor costs in all the restaurants and bars have decreased.

There is no system that works in every situation. Since everyone deals with their disposable income differently, to forecast how this money will be spent at your hotel is difficult at best. Understanding this, your goal should be to find the most reasonable and accurate forecasting method that addresses the most important factors, yet is still simple enough to be produced time efficiently. A computer has yet to be developed that can make human decisions; it can only look at the numbers and produce more numbers. It is your job to interpret the numbers and use them to effectively manage your restaurant. *

## Three-Day Kitchen Forecast

| Menu ltem | Today <br> Oty. | Day $+\mathbf{1}$ <br> Oty. | Day+2 <br> Qty. |
| :--- | ---: | ---: | ---: |
| 1 Egg | 216 | 116 | 135 |
| 2 Eggs | 16 | 9 | 10 |
| Bacon | 158 | 85 | 98 |
| Bagel | 80 | 43 | 50 |
| Coffee | 381 | 205 | 237 |
| French Toast | 7 | 4 | 5 |
| Ham | 32 | 17 | 20 |
| Milk | 33 | 18 | 20 |
| Muffins | 96 | 52 | 60 |
| Omelette | 8 | 4 | 5 |
| Orange Juice | 301 | 162 | 188 |
| Pancakes | 5 | 3 | 3 |
| Steak \& Eggs | 0 | 0 | 0 |
| Toast | 190 | 102 | 118 |
| Waffels | 4 | 2 | 3 |
|  |  |  |  |

Figure 10
Macros Used in the Forecasting Model

CGUEST7~GUEST8~
/CGUEST6~GUEST71~
/C2DAYFCST1A~TDYGUEST~
/CBLANK~RESET1~
/RVCOVERS6~COVERS7~
/RVABSTRACT6~ABSTRACT7~
/CBLANK2~ABSTRACTTDY~

PPRABSTRACT~AGPQ
/PPRAVAILABLE~AGPQ
/PPRFCST~AGPQ
/PPRKITCHENFCST~AGPQ
/PPRPAYROLLCRITERIA~AGPQ

## ALT-C - TO MOVE THE ROLLING AVERAGE

COPY THE CURRENT 7 DAYS HISTORY OF INHOUSE GUESTS BACK ONE DAY
COPY THE CURRENT 6 DAYS HISTORY OF AVAILABLE GUESTS BACK ONE DAY

COPY THE FORECASTED AVAILABLE GUEST BACK ONE DAY

REPLACING THE INPUT ACTUALS WITH A BLANK COLUMN
COPY THE CURRENT 6 DAYS HISTORY OF SALES ABSTRACTS BACK ONE DAY
COPY THE CURRENT 6 DAYS HISTORY OF COVERS BACK ONE DAY

REPLACING THE INPUT ACTUALS WITH A BLANK COLUMN

ALT-P - TO PRINT THE DAILY REPORTS

TO PRINT THE RANGE NAME ABSTRACT (SALES ABSTRACTS)
TO PRINT THE RANGE NAME AVAILABLE (AVAILABLE GUESTS)

TO PRINT THE RANGE NAME FCST (DAILY FORECAST FLASH)
TO PRINT THE RANGE NAME KITCHENFCST (KITCHEN FORECAST)

TO PRINT THE RANGE NAME PAYROLL CRITERIA (PAYROLL STAFFING GUIDE)

