

With the growth of Hard Rock Café- from one pub in London in 1971 to more than 185 restaurants in 74 countries today- came a corporatewide demand for better forecasting. Hard Rock uses a corporate wide demand for better forecasting. Hard Rock uses long-range forecasting in setting a capacity plan and intermediate-term forecasting for locking in contracts for leather goods and for such food items as beef, chicken, and pork. Its short term sales forecasts are conducted each month, by café, and then aggregated for a headquarters view.

The heart of the sales forecasting system is the point-of-sale (POS) system, which, in effect, captures transaction data on nearly every person who walks through a café's door. The sales of each entrée represents one customer; the entrée sales data are transmitted daily to the Orlando corporate headquarters' database. There, the financial team, headed by Todd Lindsey, begins the forecast process. Lindsey forecasts monthly guest counts, retail sales, banquet sales, and concert sales at each café. The general managers of individual cafes tap into the same database to prepare a daily forecast for their sites. A café manager pulls up prior years' sales for that day, adding information from the local Chamber of Commerce or Tourist Board on upcoming events such as major convention, sporting event, or concert in the city where the café is located. The daily forecast is further broken into hourly sales which drives employee scheduling. An hourly forecast of \$5,500 in sales translate into 19 workstations, which are further broken down into a specific number of waitstaff, hosts, bartenders, and kitchen staff. Computerized scheduling software plugs in people based on their availability. Variances between forecast and actual sales are then examined to see why errors occurred.

Hard Rock doesn't limit its use of forecasting tools to sales. To evaluate managers and set bonuses, a 3-year weighted moving average is applied to café sales. If café general managers exceed their targets, a bonus is computed. Todd Lindsey applies weights of 40% to the most year's sales, 40% to the year before and 20% to sales 2 years ago to reaching his moving average.

An even more sophisticated application of statistics is found in Hard Rock's menu planning. Using multiple regression, managers can compute menu planning. Managers can compute the impact on demand of other menu items if the price of one item is changed. For example, if the price of a cheeseburger increases from \$15 to \$16, Hard Rock can predict the effect this will have on sales of chicken sandwiches pork sandwiches and salads. Managers do the same analysis on the menu placement, with the center section driving sales volumes. When an item such as a hamburger is moved off the center to one of the side flaps, the corresponding effect on related items, say French fries is determined.

#### Discussion Questions:

1. Name three other areas in which you think Hard Rock could use forecasting models.
2. What is the role of POS system in forecasting at Hard Rock?
3. Do you agree with the weighting system used to evaluate managers' bonuses?
4. Name several variables besides those mentioned in the case that could be used as good predictors of daily sales in each café.
5. At one of the locations, a manager is trying to evaluate how a new advertising campaign affects guest counts. Using the following 10 months data, forecast the expected guest count when advertising at year 11 has increased by 10%.

Month	1	2	3	4	5	6	7	8	9	10
Guest count (in 000)	21	24	27	32	29	37	43	43	54	66
Advertising in (\$000)	14	17	25	25	35	35	45	50	60	60