EXHIBIT 4

Sample dashboard

Table Occupancy

| | Start Date: | 7/23/12 | End Date: | 8/27/12 | Hot | 80% |
| | Comparison Start Date: | 7/3/12 | Comparison End Date: | 7/21/12 | Cold | 50% |

Table Occupancy 07/23/2012 - 08/27/2012

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Weekday	Weekend	All	Meal
											Closed
											Closed
6:00 - 7:00 am	16%	19%	21%	31%	25%	22%	31%	24%	24%	33%	Breakfast
7:00 - 8:00 am	56%	81%	62%	83%	74%	70%	71%	67%	57%	89%	Breakfast
8:00 - 9:00 am	99%	100%	87%	97%	89%	91%	85%	74%	75%	104%	Breakfast
9:00 - 10:00 am	100%	87%	84%	81%	84%	75%	86%	48%	107%	91%	Breakfast
10:00 - 11:00 am	78%	70%	72%	63%	73%	66%	84%	29%	98%	68%	Lunch
11:00 - 12:00 pm	75%	24%	24%	22%	24%	32%	44%	6%	47%	24%	Lunch
12:00 - 1:00 pm	67%	22%	15%	13%	18%	20%	42%	10%	51%	31%	Lunch
1:00 - 2:00 pm	50%	25%	17%	11%	15%	16%	33%	7%	37%	22%	Lunch
2:00 - 3:00 pm	40%	9%	6%	3%	3%	5%	10%	1%	16%	7%	Lunch
3:00 - 4:00 pm	12%	1%	1%	0%	0%	1%	1%	0%	1%	0%	Lunch
4:00 - 5:00 pm	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	Lunch
5:00 - 6:00 pm	2%	1%	0%	1%	3%	0%	1%	1%	2%	2%	Dinner
6:00 - 7:00 pm	46%	57%	51%	54%	46%	35%	51%	37%	73%	66%	Dinner
7:00 - 8:00 pm	74%	93%	85%	84%	77%	60%	87%	32%	33%	45%	Dinner
8:00 - 9:00 pm	75%	88%	75%	78%	69%	65%	94%	27%	35%	41%	Dinner
9:00 - 10:00 pm	47%	52%	44%	47%	40%	42%	63%	7%	8%	11%	Dinner
10:00 - 11:00 pm	18%	20%	17%	19%	14%	15%	25%	0%	2%	1%	Dinner
11:00 - 12:00 am	3%	4%	3%	4%	3%	2%	5%	0%	0%	0%	Dinner

Overall Occupancy **40%**

ers enjoyed the competition and liked the recognition. Now the restaurants show sales results on a weekly basis so servers can see how they are performing versus their peers.

Is It Hot or Is It Cold?

In addition to the all-purpose tools that we just outlined—tools that can be applied no matter how busy a restaurant is—certain revenue management tools work better if a restaurant is extremely busy or not busy at all. Thus, the choice of RM tools we discuss next depends upon how busy your restaurant is. As a starting point, we have found it effective to classify different time periods as either hot (busy) or cold (not busy). This simple approach works well and, in our experience, makes it easier for restaurants to determine which tools to deploy at which times.[7]

Telltale signs of hot periods are full tables, queues, and declined reservations. Conversely, cold periods are easy to spot—too many empty tables. Typically, a restaurant will have some hot periods and some cold periods. The trick is to identify when they occur.

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[7] This characterization was borrowed from erstwhile coauthor John Alexander, former CEO of CBORD, a provider of menu systems, food production management, and other computerized support for congregate dining facilities. See: Kimes *et al*. 1999.
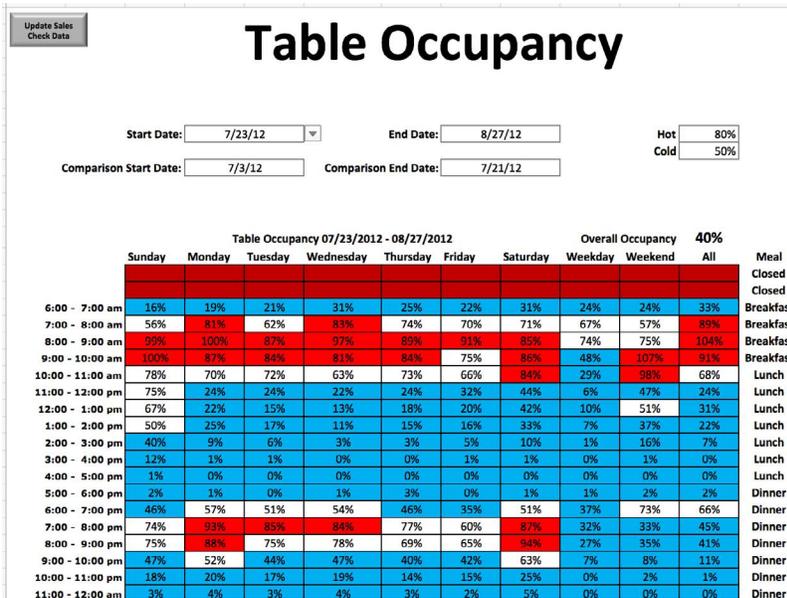
To identify hot and cold periods at Fairmont, we calculated table occupancy by day of week and month. Hot periods were typically defined as hours in which the table occupancy was over 80 percent, while cold periods were usually defined as hours in which the table occupancy was under 50 percent. Each restaurant involved with the RRM program was provided with a simple dashboard that allowed them to quickly see the percentage of time the restaurants had hot or cold periods (Exhibit 4). Once these had been identified, the restaurant manager, the director of food and beverage, and the director of revenue management could begin to determine which tools to deploy at which times.

Tools to deploy during hot times are adopting a better table mix, better managing reservations, restricting promotions, and implementing premium pricing. Suggestive selling can also be used, but only if it does not extend meal duration, since it would it most probably be better to seat another party rather than sell espresso and dessert.

During cold (or not-hot) periods, the operator should focus on making the best of the situation by maximizing its use of distribution channels (online and mobile reservations or ordering) and offering targeted promotions and discounts. Servers should also use suggestive selling since it really doesn't matter how long guests stay at a table. On the other hand, trying to find a better table mix is not really an issue since tables are empty anyway. Exhibit 5 summarizes the appropriate tools to be deployed for hot and cold periods

Hot Tools

Let's look at the "hot tools" in more detail.

Adjusting table mix. The optimum table mix matches the mix of table sizes and availability to the mix of party sizes. Thus, telltale signs that indicate that the table mix should be changed are when there's a mismatch between table and seat occupancy or a mismatch between the party-size mix and the table-size mix, and when there's a queue because all tables are occupied even though there are plenty of empty seats.

A study on the impact of the optimal table mix at Chevys FreshMex restaurants found that the optimal table mix would allow a restaurant to serve up to 35 percent more customers while maintaining the same waiting time.[8] Clearly, an improved table mix has great promise for busy restaurants.

Table mix at Fairmont. While an optimal table mix can help increase revenue, Fairmont noticed that many of their restaurants were not busy enough to justify the investment unless they were undergoing a renovation. The firm viewed an optimal table mix as an ideal, but from a practical perspective they instead chose to focus on providing a flexible table mix that could be reconfigured by meal period and day of week, on other restaurant design features, and on selecting the right mix of reservations.

By having a flexible table mix, Fairmont could change their table mix according to expected party size mix for each meal period (either from reservations data or from historical data). This is not the same as changing their table mix as parties arrive. As Thompson has shown, changing the table mix "on the fly" is a suboptimal solution for larger restaurants (defined as 200 seats) since it results in idle tables.[9]

Fairmont has also been designing their restaurants so that the various spaces flow into each other. For example, the bar might flow into the restaurant. During breakfast, they install soft separators such as flowerpots to separate the restaurant from the bar, but for other meal periods, they remove the soft separators so that they are able to fully use both spaces.

Better manage reservations. As with hotel RM during high demand periods, it is important to make it easy for people to make reservations, select the "right" reservation requests, and manage both the arrival uncertainty (late-shows and no-shows) and duration uncertainty (length of meal).

Reservations Management at Fairmont

Select the right reservation requests. Fairmont has adopted the approach of selecting the party-size mix that best fits their table mix. For example, the Imperial

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[8] California-based Chevys FreshMex operates three dozen restaurants, most of them in the southwestern United States. See: Kimes, Sheryl E., and Gary M. Thompson. 2004. "Restaurant Revenue Management at Chevys: Determining the Best Table Mix," *Decision Sciences*, 35(3): 371-392; and Kimes, Sheryl E. and Gary M. Thompson. 2005. "An Evaluation of Heuristic Methods for Determining the Best Table Mix in Full-service Restaurants," *Journal of Operations Management* 23.6 (2005): 599-617.

[9] Thompson, Gary M. 2002. "Optimizing a Restaurant's Seating Capacity: Use Dedicated or Combinable Tables?," *Cornell Hotel and Restaurant Administration Quarterly*. 43(4): 48-57.

Appropriate RRM tools

| Tool	'Hot'	'Cold'
Menu Engineering	Yes	Yes
Menu Design	Yes	Yes
Server mentoring/ upselling	Yes	Yes
Table mix	Yes	No
Reservation management	Better manage	Maximize distribution channels
Promotions	Restrict	Yes
Suggestive selling	Only if doesn't extend duration	Yes
Pricing	Premium	Selected discounts

Bar at the Royal York in Toronto is quite busy during happy hour (between 6:00 and 8:00 p.m.) for most days of the week. Most of their tables are designed for four or more guests. Since the GM did not want to change the table mix until the Imperial Bar had to undergo a renovation, they decided to not accept party sizes of less than three during happy hour. Similarly, Singapore's Jaan restaurant started to select more parties of four so that they could better match their party-size mix to their table mix.

Make it easy to buy. At the restaurants at the Fairmont and Swissôtel in Singapore, we noticed that about half of guests made their reservations the same day as they dined and that there were more reservations on weekends. In addition, there were significant same-day reservation attempts made between 7:00 and 8:00 p.m. However, we observed that the reservation office closed at 7:00 p.m., at which point calls were then directed to the restaurants (with a high likelihood of not being answered!). By extending the reservations office closing time by one hour, the firm was able to generate S$50,000 in incremental revenue per month.

Overbooking. Equinox, a fine-dining restaurant also at the Swissôtel Singapore, had a 40-percent no-show and cancellation rate. Given that there was no penalty levied for no-shows, we analyzed the no-show and cancellation rates in detail and developed appropriate overbooking levels. To reduce no-shows, we had the reservations staff call to confirm reservations.

Exhibit 6

Bow Valley Grill: Seat occupancy by day of week and hour of day

Hour of day
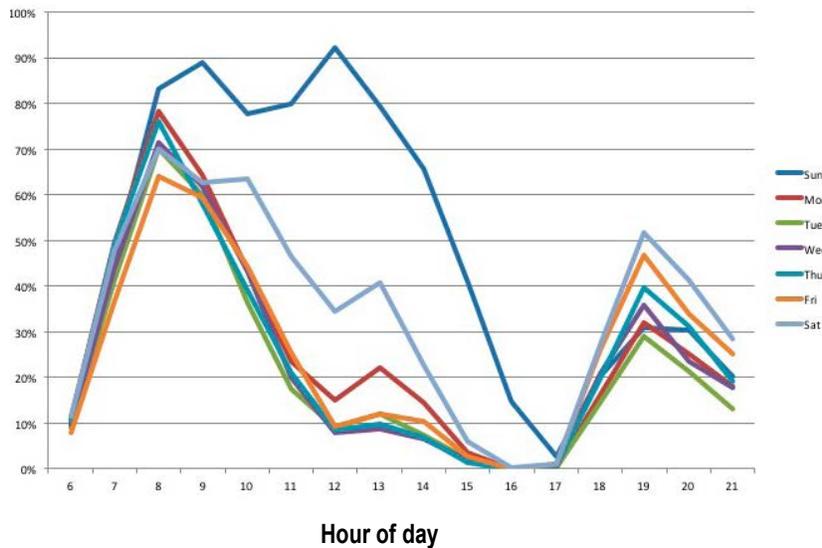
As a result, the cancellation rate dropped to about 21 percent.

Reduce arrival and duration uncertainty. We noticed that Fairmont's Chinese restaurants were extremely busy for the traditional Chinese New Year dinner. Offering 6:00 and 8:00 p.m. seatings controlled meal duration to some extent, but the restaurants still experienced no-shows and late-shows. As a first step, the restaurants implemented a non-refundable pre-payment for the *prix fixe* meal. As a result, no-shows dropped significantly. Management also did not allow substitutions in the menu items and made sure that food delivery began promptly at 6:00 or 8:00 regardless of whether the guests were on time for their seating.

Don't turn away potential business. The Jazz Bar at the Fairmont Peace Hotel in Shanghai was extremely busy during peak periods, and management often turned customers away at the door. Rather than continue to lose this business, they opened up the adjoining Cin-Cin room for food and beverage service. Guests could enjoy their reasonably priced drinks and snacks while still listening to the music in the bar.

Promotions. Given that promotions are designed to build demand during slow periods, they should not be offered during hot periods since you don't need the extra demand. If a restaurant offers promotions during busy periods, it might end up giving unnecessary discounts.

Pricing. Pricing can be used to help build demand during slow periods but also to capitalize on high demand periods by charging premium prices. During busy periods, a restaurant might be able to charge a premium or possibly increase prices on popular menu items. Research has shown that customers consider time-of-day and day-of-week pricing to be relatively fair, especially if framed as a discount (that is, full price during busy times and a reduced price during slow periods).[10]

Pricing at Fairmont

Bow Valley Grill. Seat occupancy for the Saturday and Sunday brunches at the Bow Valley Grill in Banff, Alberta, Canada, topped 90 percent. Other times of day and days of week were not all that busy, except for breakfast between 8:00 and 10:00 a.m. (Exhibit 6). The director of F&B maximized his turns during the brunches and increased the Sunday brunch price by $3 (about a 10-percent increase). As a result, Sunday brunch profit increased by 6 to 7 percent.

City Space and Equinox. Similarly, City Space and Equinox at the Swissôtel Singapore, which offered an excellent view, employed premium pricing for their window tables by instituting a $20 charge for non-hotel guests using those tables. As a result, Equinox generated nearly $100,000 per year from the window table charges. In addition, the average check per person for guests paying to sit at the window seats was over $5 higher ($142.57) than those at non-window seats ($136.92).

Suggestive selling. Suggestive selling should be applied judiciously during hot periods. For example, when only one or two guests at a table order a particular course, the server should suggest that the other guests do so as well, or if guests only order one or two drinks during their meal, effective servers should ask all guests if they would like another drink. But during busy times, it is probably unwise for servers to push dessert (or any additional course) if no one has ordered one since all this would do is increase meal

[10] Kimes, Sheryl E. and Jochen Wirtz. 2003. "When Does Revenue Management Become Acceptable?," *Journal of Service Research*. 7 (2): 125-135; and Wirtz, Jochen and Sheryl E. Kimes. 2007. "The Moderating Role of Familiarity in Fairness Perceptions of Revenue Management," *Journal of Service Research*. 9 (3): 229-240.

EXHIBIT 7

Jazz Bar: Number of checks
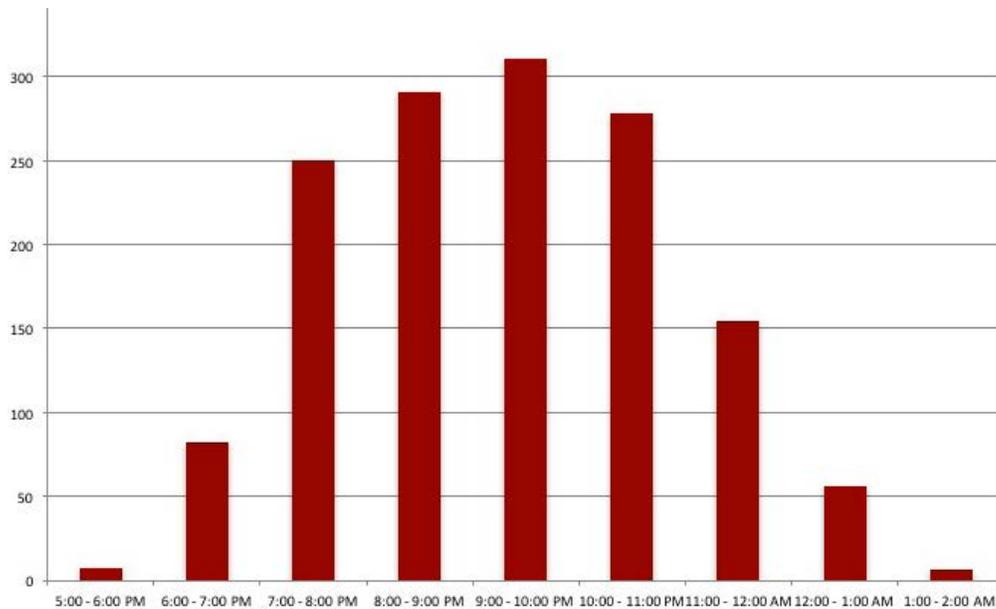
duration and preclude other guests from being seated at the table.

Suggestive selling at Fairmont. With those caveats in mind, Fairmont restaurants developed and deployed a number of innovative methods of suggestive selling during hot periods. For example, Prego in Singapore offered a set menu. If one person at a table chose that *prix fixe* option, the server would suggest it for everyone. Similar approaches were used at other Fairmont restaurants.

Cold Tools

Tools for cold periods are intended to encourage greater sales in slow times. As we mentioned above, adjusting the table mix isn't one of those tools, but improving reservations, pricing, and upselling can be valuable.

Reservations and distribution. When you're cold, be sure to make it easy for your customers to make a reservation, and if you don't take reservations make it easy for them to order food from you. Well-chosen outside distribution channels can also generate additional revenue (even if they add cost) since customers can make reservations or order food whenever they want, regardless of whether you're open and answering the phone. In addition, food-service distribution sites increase awareness of your restaurant and may result in new customers who want to give you a try.

Promotions. Cold-period promotions could include offering live music, developing special menus, and building affiliate programs. The important thing to remember is to carefully target the promotions so that they are only available during cold periods, and they attract customers who might not normally have come to your restaurant at all or at least would not have come at that time.

Promotions at Fairmont. The Peace Hotel's Jazz Bar offered two music sets: a popular Old World Shanghainese band that played from 8:00 to 11:00 p.m. and an international modern jazz band that played from 11:00 p.m. to 2:00 a.m. (Exhibit 7).

Restaurant managers noticed that while demand was high (often with long queues) from 8:00 to 11:00, traffic was relatively slow from 5:00 to 8:00 p.m. and after 11:00. They worked with travel agents to develop group packages during the early evenings and replaced the jazz band with a second Old World Shanghainese Band. As a result, the Jazz Bar achieved revenue 14 percent above budget.

Pricing. Pricing tactics during cold periods could involve offering lower prices at certain times of day or days of week. The important point here, of course, is not to lower prices for guests who were going to buy at full price. Thus, discounts must be fenced, meaning that customers must meet certain conditions in order to obtain the special price. Rate fences come in all

Exhibit 8

Low lunchtime seat occupancy at Mikuni Roboyaki counter
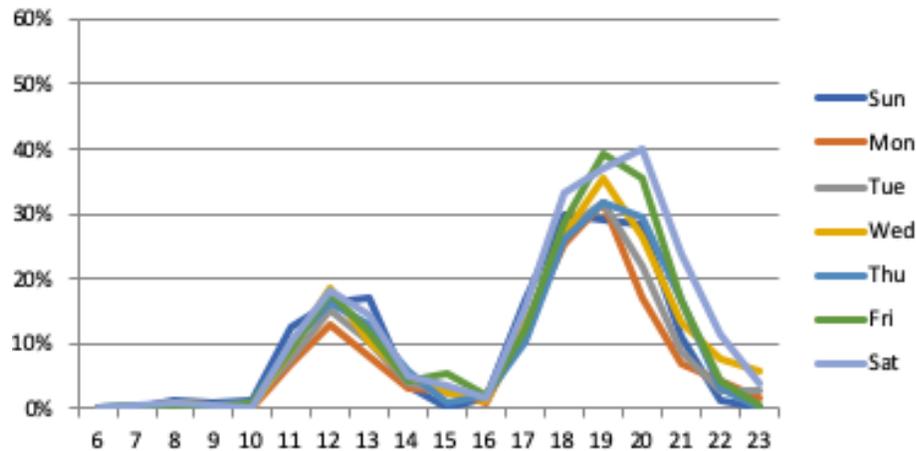
forms including physical (e.g., table location), transaction-based (e.g., time of day or day of week), customer-based (e.g., age or group affiliation), or controlled availability (e.g., promotional code).

Pricing at Fairmount. At Mikuni, the lunch time seat occupancy at the Robotayaki counter was quite low (Exhibit 8), while the tables in the rest of the restaurant were relatively busy. This restaurant also turned to a *prix fixe* approach, instituting a special S$58 set lunch that was only available at the Robotayaki counter. As a result, counter seat occupancy increased by 25 percent, counter sales increased by 105 percent, and Mikuni achieved a 15-percent year-over-year performance over budget.

Suggestive selling. Upselling and suggestive selling are excellent tactics during cold periods. Since the restaurant is slow anyway, it doesn't particularly matter how long customers occupy a table, meaning that servers can suggest additional courses. If guests don't order an appetizer, for instance, servers should recommend a starter. The same approach can be used for espresso and desserts, as well as for after-dinner drinks.

Suggestive selling at Fairmont. The Tonga Room, a restaurant and bar in the San Francisco Fairmont, applied menu engineering principles to determine their Cash Cows. When the analysis identified the Mai Tai cocktail as a Cash Cow, the restaurant featured it as a signature item. Servers would make a point of asking guests whether they would like a second drink when they were finishing off their first drink. They also increased the price of a Mai Tai from US$12 to US$13. As a result, monthly sales increased by 47 percent.

Summary and Conclusion

Effective data collection and analysis are the key factors in all the tactics and strategies that we have outlined in this report. With the proper revenue management data in hand, managers can have ready their all-purpose strategies, their strategies to use when the restaurant is busy, and strategies to use when things are slow.

We must also emphasize that implementing RRM often involves overcoming significant organizational challenges. Given that RRM is a different way of thinking, it is typical to encounter some resistance. In implementing the revenue management approach, it is also important to be sensitive to the operational pressures that the F&B team faces.

Fairmont sought to minimize any possible resistance by involving F&B teams in the RRM process. The company first developed the dashboard that illustrated the baseline performance. They then conducted short property-based RRM seminars for the F&B operators, presented the dashboard for specific outlets, and then asked the F&B team from that outlet to look at the dashboard and come up with two or three initiatives to test.

The revenue management team positioned itself as the provider of analytical support and left the ideas and implementation to the F&B teams. The RM group also made sure to celebrate the teams' successes both in person, by reporting directly to the hotel general manager, and through social media.

As a result, by 2016, RRM had been applied to over 70 percent of Fairmont's restaurants' F&B revenue sources. Within 12 months of implementation, restaurants using RRM generated five times more revenue growth than restaurants not using RRM. ∎