Restaurants that take reservations have traditionally had complete control over their distribution and have relied on customers calling the restaurant to make reservations. Restaurant distribution is rapidly changing as third-party reservation sites such as OpenTable.com and http://UrbanspoonRez.com have entered the market and restaurants offer online reservations through their own websites. The emergence and popularity of these sites offers the possibility for true distribution and revenue management to evolve in the restaurant industry. In the future, the use of mobile reservations applications and third-party sites will continue to grow as restaurant IT systems begin to become more integrated. This trend has considerable implications for the way in which restaurants will manage their distressed inventory through both allocations and coupon promotions and in how they manage their revenue. The challenge for Revenue Management researchers and practitioners is to understand how best to apply the lessons learned in other industries to the emerging distribution and revenue management issues in the restaurant industry.

**Keywords:** restaurants; distribution management; revenue management
INTRODUCTION

Restaurants that take reservations have traditionally relied on telephone reservations and walk-in business. The growth of online restaurant reservations has forced restaurants to rethink the way in which they manage their distribution. Whereas before restaurants had complete control over their table inventory and its distribution, this growth of third-party reservation sites (such as OpenTable.com) has caused restaurants to have much less control over their distribution. Not surprisingly, this loss of control has led to some resentment as restaurants try to balance the cost of these sites with the perceived incrementality of the business booked through these sites (Consentino and Pastore, 2010; Stross, 2010). In a sense, their complaints are quite similar to those of the hotel industry when Online Travel Agents started to gain strength.

In this article, I will first provide an overview of major restaurant distribution channels and along with their relative advantages and disadvantages, present the issues that restaurants should consider when developing their distribution strategy and discuss the future of restaurant distribution management. While the focus of this article is restaurants that take reservations in the United States (estimated at approximately 30,000 restaurants), the trends observed have equal applicability to other parts of the world.

RESTAURANT DISTRIBUTION CHANNELS

Restaurants have four basic ways to distribute their inventory: (1) the traditional telephone method, (2) call centers, (3) online or mobile through their own website or application or (4) online or mobile through general third-party reservations sites or applications. Each has associated strengths and weaknesses (please see Table 1 (See PDF)).

Telephone reservations
Telephone reservations give the restaurant more control over the way they take bookings and allow them to have a personal connection with their customers. During busy times, it may be difficult to take reservations because of other demands on restaurant staff. From a customer perspective, telephone reservations may be seen as problematic because of restricted hours, difficulty in calling the restaurant during busy periods and sometimes inconsistent service. Telephone reservations can be handled by either having customers call the restaurant directly or by having them call a dedicated reservation call center.

Online reservations

Online restaurant reservations have been available since the late 1990s and have grown in importance and acceptance over the years. OpenTable.com with a 90 per cent share of the US online restaurant reservation market, and seats approximately 5 million diners per month (OpenTable Corporate Presentation, 2010; Severman, 2010). By August 2002, after just three years of operation, this site had seated 1 million customers and by June 2010, that number exceeded 15 million diners per quarter. The number of restaurants accepting reservations via this website has risen from only 10 in 1999 to over 14 100 in mid-2010 (OpenTable Corporate Presentation, 2010).

Online reservations can be either taken through a third-party site (such as OpenTable or UrbanspoonRez) or through the restaurant's own website, as I discuss below (for more information about the online providers, please see McLaughlin, 2010). Table 2 (See PDF) summarizes information on the major online providers.

Third-party site

Third-party sites such as OpenTable or UrbanspoonRez offer reservations at a number of restaurants and show customers the availability of reservations at their desired times. Reservations are
fairly easy to make. When a reservation is made, an email confirmation is immediately sent to both the customer and the restaurant. Reservations can be made 24 hours a day and are transferred directly to the restaurant. Restaurant operators have the option of putting all or some of their table inventory online. Since customers are not contacting the restaurant directly, there may be a loss of personal connection with the restaurant.

In addition, these sites often offer additional services such as electronic reservation books, guest history systems and table management systems that may be very beneficial to the restaurant. The electronic reservations books help restaurants keep better track of reservations (regardless of distribution channel) and allows them to better control availability. In addition, the guest history systems associated with some of the systems can allow restaurant to track guest preferences and help personalize their service. Finally, the table management system capabilities can help restaurants better manage their tables so that they can know when tables are available so they can minimize the time that tables sit idle.

Restaurant website

Restaurants can also develop their own website for taking reservations. By doing so, they give their customers the convenience of making reservations at any time but also control the restaurant information that is provided to the customer. In addition, customers do not see information on competing restaurants. While the personal connection is not as high as if someone calls the restaurant, it is higher than that achieved through a third-party website.

Restaurants have several choices for powering the online reservations capabilities of their websites. Many US restaurants are connected through OpenTable.com (at US$0.25 per seated diner), while others use companies that provide website reservation capabilities.
THINGS TO CONSIDER

Before making a decision on which distribution channels to use, restaurants must consider (1) customer preferences, (2) incrementality of the business and (3) other ancillary services such as electronic reservation books, guest history systems and table management systems that may be associated with general reservation sites.

Customer preferences

As stated above, a number of restaurant operators would prefer to have customers call them to make a reservation, but many customers prefer the convenience associated with online reservations. About one-third of US adults who have dined at a restaurant that takes reservations have made an online reservation. Online reservation users find online reservations to be significantly more convenient than telephone reservations (Kimes, 2009). Online reservations are considered to be significantly faster and give customers the ability to contact the restaurant when they want. Online users find online reservations to be as reliable as phone reservations, but feel that the service orientation associated with online reservations is lower than that of phone reservations (Kimes, 2009).

Other research has shown that consumers who have made an online reservation are significantly more likely to continue to make online reservations in the future (Dixon et al., 2009). The net result of the customer preference for convenience is that restaurants need to consider offering online reservations. Failure to do so may lead to a loss of business as customers may become more attracted to restaurants that offer this convenience. It is true that customers choose restaurants on the basis of quality of food and service, but all things being equal, they may prefer to make an online reservation with a restaurant that has equally good food and service.
Incrementality

One of the concerns that restaurant operators must address is the incrementality of a reservation. If the customers who made an online reservation through a third-party reservation site or purchased an online coupon were going to come to the restaurant anyway, the investment in that distribution channel may not be worth it. Another consideration is the repeat business that might be generated from online reservations.

There is some evidence that online reservations are incremental. OpenTable estimates that about one-third of online reservations are made at times when restaurants are not open.

Other ancillary services

The added services offered by the third-party sites might make their added cost worth it. For example, having an electronic reservation book can improve accuracy and provide better record-keeping capabilities. Having a more organized guest history system can allow the restaurant to provide more personalized service and having a table management system can help the restaurant make better use of its available tables. The impact that these services might have on costs (and potential revenues) must be considered.

A GLIMPSE TO THE FUTURE

Restaurant distribution has seen dramatic changes over the past 10 years. What does the future hold? I see five emerging trends that will greatly affect how restaurants distribute their inventory in the future.
Growth of mobile applications

Both UrbanspoonRez and OpenTable offer mobile versions of their reservation website. As with online hotel, airline and rental car mobile sites, restaurant reservations made through mobile applications tend to have a shorter booking window and are often made for the same day. OpenTable's mobile app was started in November 2008 and provides approximately 8 per cent of their business (Schonfeld, 2010). Mobile apps are expected to grow in importance as the adoption of smart phones increases.

Continued growth of third-party reservations sites

Third-party sites are expected to grow in importance as customers seek the convenience and choice associated with this distribution channel. For example, currently about 36 per cent of the North American restaurants that take reservations have OpenTable installed and about 8 per cent of diners who make reservations come from OpenTable. To put this in perspective, in San Francisco, the home base of OpenTable and the hub for a number of Internet startups, 67 per cent of the restaurants use OpenTable and 24 per cent of reservations come from OpenTable (OpenTable Corporate Presentation, 2010). It seems that there is a fair amount of growth potential.

Possible commoditization of restaurants

As third-party sites grow in importance, it is possible that consumers might become more loyal to the third-party site (perhaps because of redeemable rewards points) than to individual restaurants. It is possible that consumers will use these sites to 'shop' for restaurants with availability rather than to just contact the restaurant directly.

The emergence of customer relationship management
Restaurant IT systems are generally not well integrated. Nearly all restaurants have a Point of Sale (POS) system, some have a Kitchen Display System and some use POS data consolidators (such as Avero) to help make better decisions. It seems inevitable that these systems will eventually be connected. By having full (or even partial!) system integration, restaurants could tie spending behavior in with the reservations system and be able to make better decisions as to which reservation requests to accept for which time slots.

The emergence of computerized restaurant revenue management

The growth of restaurant distribution systems combined with the increasing importance and sophistication of restaurant IT systems creates the possibility that true Revenue Management (RM) might emerge in the restaurant industry. Consider the following possibilities.

Disposing of distressed inventory

Several avenues for distributing distressed inventory (that is, tables during off-peak times) currently exist. For example, restaurants can use the OpenTable Dining Rewards program in which customers receive OpenTable points which can be redeemed for cash, DinnerBroker.com in which customers get a percentage discount for restaurant-designated slow periods or PriceYourMeal.com in which restaurants can essentially auction off meals during off-peak periods (Kimes et al., 2010). While these channels are currently available, restaurants have little guidance as to when these channels should be used and the amount of inventory which should be allocated. True RM could help restaurants make better decisions on how best to distribute their distressed inventory.

Allocation by distribution channel
Like hotels and airlines, restaurants could forecast demand by distribution channel and decide how much inventory to allocate to each so that they can maximize profit. For example, if there is sufficient demand through the restaurant's website or through phone reservations, they may choose to limit the number of tables available through other higher-priced third-party sites.

**Discount coupon allocation**

The growth of online coupon services such as Groupon (recently purchased by Google), OpenTable Spotlight and Dealon has created a dilemma for restaurant operators (Dholakia, 2010; Stone, 2010). While these programs may bring in additional revenue and customers, restaurants typically have little control over the number of coupons that are sold or when they are used. Dholakia, (2010) found that 42 per cent of the restaurants in his sample of 150 businesses that had used Groupon found the promotions to be unprofitable and that customers using these coupons spent less and had a lower return rate than other customers. There is great potential for models which would help restaurants make decisions on the number of coupons to make available and to determine when to allow their usage.

**Minimum party size restrictions**

Some of the third-party reservation systems allow restaurants to specify minimum party sizes for reservation slots. Minimum party size restrictions allow restaurants to better match their party size mix with their table size mix. By forecasting demand by party size (or perhaps even spending behavior by party size), restaurants could make better use of their existing table mix. Another alternative would be to optimize their table mix which has been shown to increase revenue by 3-5 per cent (Kimes and Thompson, 2004, 2005).
CONCLUSION

In this article, I have covered some of the recent developments in distribution management in the US restaurant industry and discussed how these trends may lead to more fully developed restaurant distribution systems. The challenge for RM and Pricing researchers is to help determine how RM and distribution methods that have been successfully been applied in other industries can be adapted to help restaurants better manage demand and to help develop new methods that can address specific restaurant distribution issues. The challenge for practitioners is to learn how to gain more control over their distribution by making better decisions.
Table 1. Comparison of distribution channels.

<table>
<thead>
<tr>
<th>Description</th>
<th>Distribution channel</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Telephone</td>
</tr>
<tr>
<td></td>
<td>Restaurant</td>
</tr>
<tr>
<td>Hours of operation</td>
<td>Limited to opening</td>
</tr>
<tr>
<td>Consistency</td>
<td>Low</td>
</tr>
<tr>
<td>Cost</td>
<td>Fairly low</td>
</tr>
<tr>
<td>Marketing opportunities</td>
<td>Some</td>
</tr>
<tr>
<td>Personal connection</td>
<td>Medium/high</td>
</tr>
<tr>
<td>Customer convenience</td>
<td>Low</td>
</tr>
<tr>
<td>Restaurant control</td>
<td>High</td>
</tr>
<tr>
<td>Accuracy</td>
<td>Varies</td>
</tr>
<tr>
<td>Ancillary services</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Record-keeping accuracy</td>
<td>Low</td>
</tr>
</tbody>
</table>
Table 2. Comparison of major third-party reservation sites.

<table>
<thead>
<tr>
<th>Company</th>
<th>Price per month</th>
<th>Price per seated diner</th>
<th>Reservation type</th>
</tr>
</thead>
<tbody>
<tr>
<td>OpenTable</td>
<td>$270</td>
<td>$1</td>
<td>Direct reservation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$0.25</td>
<td>Restaurant website</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$7.50</td>
<td>Dining rewards program</td>
</tr>
<tr>
<td>UrbanspoonRez</td>
<td>$99</td>
<td>$1</td>
<td>Direct reservation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Free</td>
<td>Restaurant website</td>
</tr>
</tbody>
</table>
References


OpenTable Corporate Presentation. (2010) http://files.shareholder.com/downloads/ABEA-2TTK09/1059025644x0x414799/4d62e86d-9bd5-4ad4-b5e0-5d9cadb25e8f/OpenTable_Corporate_Presentation_11_2_2010_FINAL.pdf.


