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Customer Perceptions of Electronic Food Ordering

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Customer Perceptions of Electronic Food Ordering

Abstract

A survey of 470 internet users found that slightly under half of them have ordered food online by mobile app, or with a text message. The chief reason for electronic ordering given by those have ordered (users) is that they gain convenience and control. The major factor that inhibits those who have not ordered via an electronic channel (non-users) is a desire for interaction (although technology anxiety is also a factor). Users are on balance younger than non-users, and users generally patronize restaurants more often than non-users. Italian food, particularly pizza, is far and away the most commonly ordered category. The single most important attribute of electronic ordering is order accuracy. That is followed by convenience and ease of ordering. Despite the availability of the internet and phone apps, the most common ordering channel is still the telephone call (53.7 percent). Electronic ordering is growing, though, as the users said they place a little over 38 percent of their orders on the restaurant's website or app. A chief implication is that restaurateurs must ensure that their ordering systems must give users perceptions of control and also be convenient. One other consideration is that customers who order food online prefer restaurants that offer delivery.

Keywords

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Customer Perceptions of Electronic Food Ordering

by Sheryl E. Kimes

Cornell University
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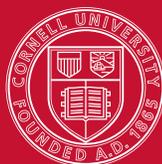
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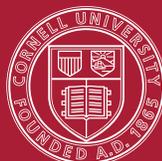
Cornell University
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EXECUTIVE SUMMARY

A survey of 470 internet users found that slightly under half of them have ordered food online by mobile app, or with a text message. The chief reason for electronic ordering given by those have ordered (users) is that they gain convenience and control. The major factor that inhibits those who have not ordered via an electronic channel (non-users) is a desire for interaction (although technology anxiety is also a factor). Users are on balance younger than non-users, and users generally patronize restaurants more often than non-users. Italian food, particularly pizza, is far and away the most commonly ordered category. The single most important attribute of electronic ordering is order accuracy. That is followed by convenience and ease of ordering. Despite the availability of the internet and phone apps, the most common ordering channel is still the telephone call (53.7 percent). Electronic ordering is growing, though, as the users said they place a little over 38 percent of their orders on the restaurant's website or app. A chief implication is that restaurateurs must ensure that their ordering systems must give users perceptions of control and also be convenient. One other consideration is that customers who order food online prefer restaurants that offer delivery.

ABOUT THE AUTHORS

Sheryl E. Kimes, Ph.D., is Singapore Tourism Board Distinguished Professor of Asian Hospitality Management at the Cornell University School of Hotel Administration, where she has also served as interim dean (sek6@cornell.edu). In teaching restaurant revenue management, yield management, and food and beverage management, she has been named the school's graduate teacher of the year three times. Her research interests include revenue management and forecasting in the restaurant, hotel, and golf industries. She has published over fifty articles in leading journals such as *Interfaces, Journal of Operations Management, Journal of Service Research, Decision Sciences*, and *Cornell Hospitality Quarterly*. She has served as a consultant to many hospitality enterprises around the world, including Chevy's FreshMex Restaurants, Walt Disney World Resorts, Ruby's Diners, Starwood Asia-Pacific, and Troon Golf.

Customer Perceptions of
Electronic Food Ordering

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G iven the growing popularity of online, mobile, and text food ordering, I wanted to investigate both the industry's use of electronic ordering and consumers' views about and use of those distribution channels. An earlier report outlined the advantages of and concerns regarding industry's use of electronic ordering, and this report is designed to present the results of a recent survey on consumers' perceptions of online ordering and how they use it or why they don't do so. My intention is to help restaurant operators better design their electronic ordering channels. This report is the second in a three-part series. Part three will present the results of a survey of how U.S. fast-casual and quick-service restaurants specifically use electronic ordering and the experience they have had with these channels.

To start this discussion, I will first give a brief overview of the U.S. restaurant industry's use of online, mobile, and text ordering, together with a look at the relevant literature, particularly in relation to the self-service aspects of this technology.[1] I'll present the survey and its results, followed by specific recommendations on how restaurant operators can use the study results to help develop a successful electronic ordering strategy.

Overview of Electronic Ordering

Restaurants can offer electronic ordering both through their own online or mobile site and through sites that serve multiple restaurants, and some restaurants also accept orders via text message or through Facebook (although that channel is little used so far).

In the first report of this series on online ordering, co-author Philipp Laqué and I found that 23 percent of the 326 largest chains in the U.S. offered online food ordering, and we pointed out that many restaurants experienced increased sales as a result of accepting electronic orders.[2] Online ordering was most frequent in the fast casual segment (48.5% of all restaurants) and the quick service segment (22.0%). Pizza (60.7%) and sandwich (61.9%) chains were most likely to accept electronic ordering, and Mexican restaurants are also active in this area (44.4%).

Customers have embraced electronic ordering. A 2010 Technomic study of 1,000 adults found that 43 percent of survey respondents had ordered food online using a computer, and 23 percent had ordered food via text message.[3] Younger

consumers were more likely to have used electronic ordering than older respondents. For example, 60 percent of respondents between 18 and 34 years old have ordered online, as opposed to 35 percent of people aged 35 or over.

Literature Review

Because electronic food ordering is essentially a self-service technology, let's look at some of the studies that have been conducted on consumer adoption of self-service approaches.[4] Well-designed self-service ordering systems give customers substantial control over the pace of their transaction and allow them to limit the amount of personal interaction they experience, if desired.[5] In most cases, an increased level of control has been shown to lead to higher customer satisfaction and greater intent to use or recommend the service.[6] Bear in mind, though, that this increased control may not be attractive to all customers, particularly those who desire personal contact. In designing a self-service system, one must focus on the issue of

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[1] For a more thorough review, please see Sheryl E. Kimes and Philipp F. Laqué, "Online, Mobile, and Text Food Ordering in the Restaurant Industry," *Cornell Hospitality Report*, Vol. 11, No. 7 (2011); Cornell Center for Hospitality Research.

[2] *Ibid*.

[3] Technomic, "Leveraging Social Media and Technology Use," Technomic Associates, 2010.

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[4] For example, see Pratibha A. Dabholkar, "Consumer Evaluations of New Technology-Based Self-Service Options: An Investigation of Alternative Models of Service Quality," *International Journal of Research in Marketing*, Vol. 13, No. 1 (1996), pp. 29–51; Matthew L. Meuter, Amy Ostrom, Robert Roundtree, and Mary Jo Bitner, "Self-Service Technologies: Understanding Customer Satisfaction with Technology-Based Service Encounters," *Journal of Marketing*, Vol. 64 (July 2000), pp. 50–64.; Matthew L. Meuter, Mary Jo Bitner, Amy L. Ostrom, and Stephen W. Brown, "Choosing Among Alternative Service Delivery Modes: An Investigation of Customer Trial of Self-Service Technologies," *Journal of Marketing*, Vol 69 (April 2005), pp. 61 – 83; and Joel E. Collier and Daniel L. Sherrell, "Examining the Influence of Control and Convenience in a Self-Service Setting," *Journal of the Academy of Marketing Science*, Vol. 38 (. 2010), pp. 490 – 509.

[5] Collier and Sherrell, *op.cit*.

[6] M.K. Hui and J.E.G. Bateson, "Perceived Control and the Effects of Crowding and Consumer Choice on the Service Experience," *Journal of Consumer Research*, Vol. 18, No. 2 (1991), pp. 174-184.

EXHIBIT 1

Demographic differences in online, mobile, and text ordering use

Variable	Description	Percentage who use electronic ordering	Variable	Description	Percentage who use electronic ordering
Gender	Female	51.9%		18 – 24	69.5%
	Male	45.0%		25 – 34	77.9%
Locale	Urban	59.8%	**Age**	35 – 49	55.4%
	Suburban	49.1%		50 – 64	32.9%
	Small town	36.4%		65+	21.1%
	Rural	41.4%			

customer control, since your customers will most probably be using the system without the presence of an employee.[7]

Perceived convenience of a self-service system also leads to an increase in both adoption and satisfaction.[8] In this instance, the definition of convenience is related primarily to access convenience and transaction convenience.[9]

The downside of self-service technology occurs with people who have technology anxiety and those who need human interaction. Meuter *et al*. have shown that these factors can affect adoption of self-service ordering and satisfaction with it.[10] Customers who evaluate service quality based on interactions with employees won't want to use self-service ordering.[11] Similarly, customers who are uncomfortable with technology may be reluctant to try an electronic self-service site because they may be afraid of getting tangled up in the technology.[12]

The Study

In January 2011 I conducted an online survey of consumers who had ordered food for takeout or delivery during the previous year. The survey was distributed through a company that works with a panel of consumers, and a total of 470 completed responses was obtained. As a consequence of the methodology, this survey takes in only those who use

the internet, for any purpose. The survey included a variety of questions on respondents' food ordering behavior, several items on their use of various ordering methods, and a series of questions designed to measure perceived control, perceived convenience, need for interaction, technology anxiety, satisfaction, and intent to use the self-service technology or recommend it to others.

The survey's demographic questions found a relatively even split by gender (with slightly more women, at 51.3%). The age distribution was fairly representative of the U.S. population (18-24, 12.6%; 25-34, 18.3%; 35-49, 19.6%; 50 – 64, 31.1%; 65+, 18.5%).[13] The majority of respondents lived in suburban (49.4%) and urban (21.7%) areas, with 14.0 percent each from small towns and rural areas.

Respondents were also asked to indicate which distribution channels they used to order food. Those who had ordered from multi-restaurant sites were asked to describe how they used these sites and respondents who had not used electronic ordering were asked to indicate the reasons they had not done so.

Results

Nearly half of the respondents (48.5%) had ordered food for takeout or delivery online. I refer to those respondents as "users," as compared to the "non-users," which is the group of slightly over half the respondents who had never made an online food order.

Characteristics of Users and Non-Users

Women were more likely than men to have used electronic ordering, but the difference was not significant (see Exhibit 1). However, what was significant was the use of electronic ordering by younger respondents, as compared to older people. In addition, respondents living in urban and suburban areas were significantly more likely to have used electronic ordering than those from rural areas or small towns.

[7] Eric Langeard, John E.G. Bateson, Christopher H. Lovelock, and Pierre Eiglier, "Services Marketing: New Insights from Consumers and Managers," Report No. 81–104 (1981), Marketing Science Institute, Cambridge, MA.

[8] Meuter *et al*. (2000), *op.cit*.; Mark Durkin, "In Search of the Internet Banking Customer," International Journal of Bank Marketing, Vol. 22, No. 7 (2004), pp. 484 – 503.)

[9] Collier and Sherrell, *op.cit*.

[10] Meuter et al (2005), *op.cit*.

[11] Christian Gronroos, "An Applied Service Marketing Theory," *European Journal of Marketing*, Vol. 16, No. 7 (1982), pp. 30 – 41.

[12] A. Parasuraman, "Technology Readiness Index (TRI): A Multiple-Item Scale to Measure Readiness to Embrace New Technologies," *Journal of Service Research*, 2 (May 2000), pp. 307–320; and Meuter *et al*. 2005, *op.cit*.)

[13] U.S. Census Bureau, 2009.

EXHIBIT 2

Technology ownership
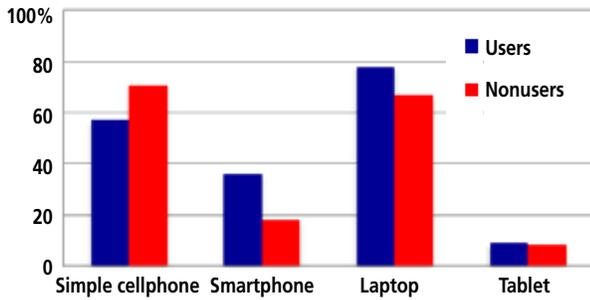
EXHIBIT 3

Frequency of email and social media use

EXHIBIT 4

Online shopping frequency
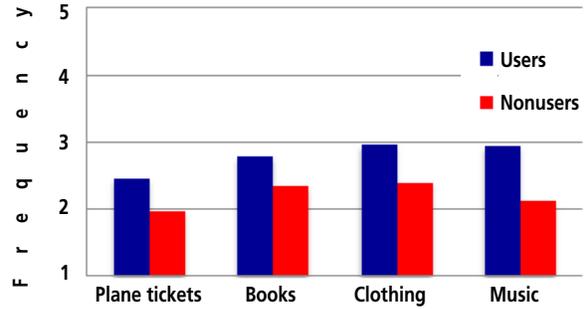
EXHIBIT 5

Foods ordered online
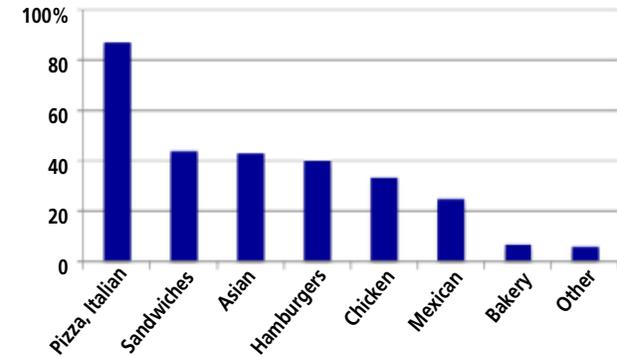
EXHIBIT 6

Factors influencing where people order

Technology use and ownership. Non-users were significantly more likely to own a simple cell phone, while users were more likely to own a smartphone. Users were also significantly more likely to own a laptop, although there was no difference in tablet ownership between the two groups (Exhibit 2).

Email and social media use. In general, those who had ordered food electronically also conducted more of their other activities online. With the exception of email, they used Facebook, Twitter, text messaging, and mobile apps significantly more than non-users (Exhibit 3). Users were also more frequent online shoppers than non-users, recording significantly more frequent purchases of plane tickets, books, clothing, and music than non-users (Exhibit 4).

Food Ordering Behavior

The most common food items ordered echoed the availability of ordering opportunities. Pizza and Italian were by far the most frequent categories (ordered by 87% of respondents), followed by sandwiches (44% of respondents), Asian (40%), and hamburgers (40%) [Exhibit 5]. Merely making electronic ordering and delivery available was not enough to draw these respondents, but it didn't hurt. They indicated that they ordered from restaurants based on previous experience (89%), location (65%), availability of takeout (53%), type of cuisine (50%), and the availability of delivery (47%) (Exhibit 6). It's worth noting that online users were significantly more likely to rely on recommendations from friends and online reviews than were non-users, and they were also more likely to choose restaurants that deliver.
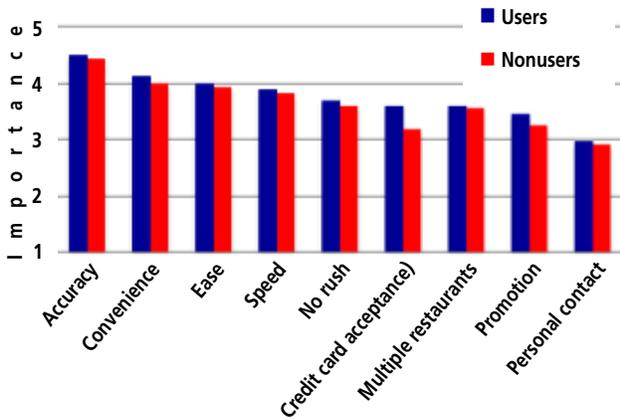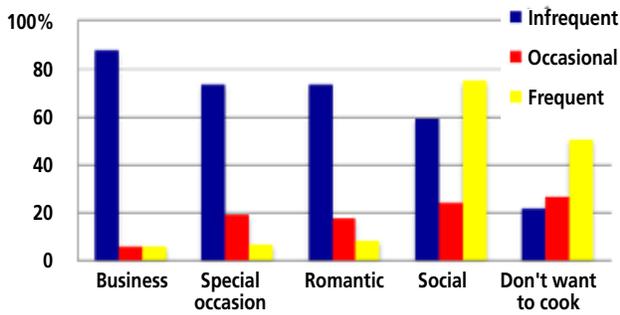
EXHIBIT 7

Importance of selection factors

EXHIBIT 8

Frequency of ordering by dining occasion

What's important. Respondents were asked to evaluate the importance of nine different attributes associated with a food order (1 = very unimportant, 5 = very important). Order accuracy was considered the most important (4.46), followed by convenience (4.07) and ease of ordering (3.97). The least important attribute was having a personal connection with the restaurant (2.95) (Exhibit 7). Online users rated the availability of promotions and acceptance of credit cards as significantly more important than non-users.

Frequency of ordering. Asked to indicate their frequency of ordering for different dining occasions (defined as at least once a month), 75.1 percent of respondents reported their most frequent reason for ordering food was for social occasions, followed by the 50.8 percent who said they ordered out because they didn't want to cook. The least likely times for respondents to order electronically were for business and romantic occasions. Just under 78 percent never ordered for business occasions, and about half never ordered electronically for romantic occasions (Exhibit 8).The user group is significantly more likely to

EXHIBIT 9

Percentage of respondents using distribution channels
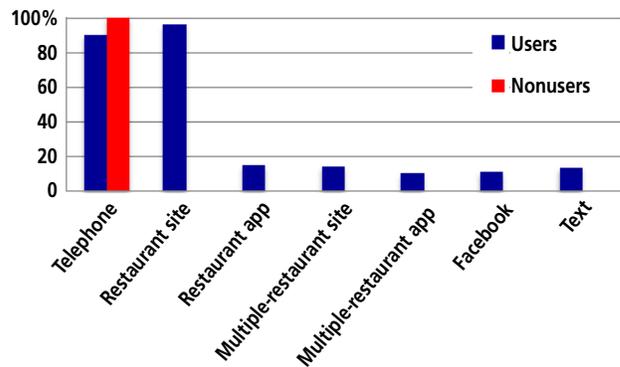
place a restaurant order of any kind than non-users are, and younger respondents also ordered more frequently than older respondents.

Distribution Channels

For the users, I wanted to find out which distribution channels respondents they used. For those who had used multiple reservations sites and apps, I asked how they had used those sites. Finally, the questionnaire presented non-users with a series of questions about their reasons for not using electronic ordering.

I calculated the following two measures of distribution channel use: (**1**) the percentage of respondents who had used a particular distribution channel, and (**2**) the percentage of orders that had been placed through each distribution channel. (I'll discuss the non-users later.)

Nearly all of the users had made a reservation on a restaurant's website (96.1%), and most had also made a reservation over the phone (89.9%). The average use of the other distribution channels (that is, restaurant app, multi-restaurant site, multi-restaurant app, Facebook, and text) ranged from 10 to 15 percent of all users (Exhibit 9).

In terms of the volume of orders placed in each channel, the online users said that they placed 53.7 percent of their orders by telephone, 38.2 percent through the restaurant's website or app, and 4.1 percent through multi-restaurant websites and apps. Just 2.6 percent were made by text and only 1.6 percent were made through Facebook (Exhibit 10). This statistic undoubtedly reflects the fact that few restaurants currently accept orders through Facebook.[14]

Multiple-restaurant sites. Respondents who had used a multiple-restaurant site or app used these sites most

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[14] As discussed in the first report in this series (Kimes and Laqué, *op.cit.*), only 3 percent of the largest restaurant chains offer Facebook ordering. This could explain why such a low percentage of orders had been made through Facebook. A quite different result might have been obtained if I had asked which method customers would prefer to use.

Exhibit 10

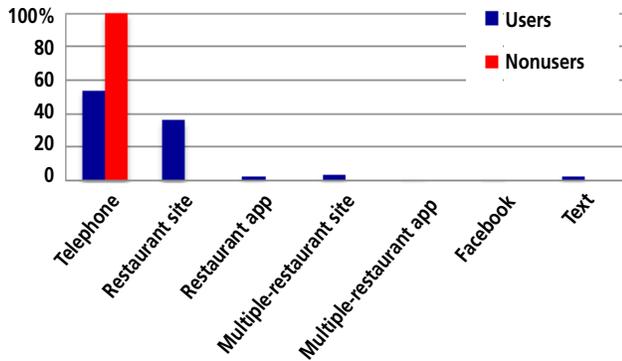## Percentage of orders made through each distribution channel

frequently to search for a specific restaurant (2.97 on a five-point scale) and to locate restaurants that delivered (also 2.97) (Exhibit 11).

Once they found a restaurant they liked, nearly half of the consumers on multiple-restaurant sites (47.1%) said they then clicked over to the restaurant's own website to order their food. About a third (32.4%) proceeded to order the food through the multiple-restaurant site. The remaining 20.6 percent said they then called the restaurant to order their food (again, this includes only searches beginning on multiple-restaurant sites).

Finally, multiple-restaurant site or app users were asked what they would do if the restaurant they were searching for was not on the multiple-restaurant site. Less than one-quarter (23.6%) said they were unlikely to place their order with that restaurant, while slightly over 40 percent said they were still likely to order their food from that restaurant.

Reasons for non-use. As previous studies have found, those who do not use electronic ordering believe that they'll do better with a human being. The most common response for not using online or mobile ordering was that the customers preferred to talk to a live person (69.4%), followed by feeling that they have a better chance of getting what they want if they talk to someone at the restaurant (43.8%) and a preference for having a personal connection with the restaurant (33.5%) (Exhibit 12).

Exhibit 11

Uses made of multiple-restaurant sites

Attitudes toward Online Ordering

The questionnaire presented respondents with sixteen statements on perceived control, perceived convenience, technology anxiety, and need for personal interaction. In addition, they were presented with five statements regarding their satisfaction with online ordering and their intention to use or recommend online ordering in the future (see Exhibit 13). Respondents were asked to indicate their agreement with each question on a 1 through 5 scale (5 = strongly agree) The wording for non-users was changed slightly to reflect the fact that they had not used online ordering.

Perceived control. As expected, online users reported a significantly higher level of control than non-users (users, 3.75; non-users, 2.83) (Exhibit 14). I also wanted to see whether perceived control varied by gender or by age. Women had significantly higher scores for perceived control than did men (female, 3.39; male, 3.15). In addition, younger respondents had significantly higher perceived control scores than older respondents did.

Perceived convenience. As with control, online users felt that online ordering was significantly more convenient than did non-users (users, 4.10; non-users, 3.48) (Exhibit 14). Women had significantly higher perceived convenience scores than men did (women, 3.83; men, 3.68). In addition,

Exhibit 12

Reasons given for not ordering online

EXHIBIT 13

Statements used to evaluate attitudes toward electronic ordering

Construct	Statement
Control	I feel in control using online ordering
	Online ordering lets the customer be in charge
	While using online ordering, I feel decisive
	Online ordering gives me more control over the food that I order for delivery or takeout.
Convenience	Online ordering allows me to initiate a transaction whenever I choose.
	Online ordering allows me to initiate a transaction at a convenient time.
	I value the ability to initiate the transaction from the comfort of home
	I like the ability to order food without leaving home.
Need for interaction	Personal contact with a restaurant employee makes ordering food more enjoyable for me
	Personal attention by a restaurant employee is important to me
	It bothers me to use a computer when I could talk to a live person instead
	Personal contact with a restaurant employee makes ordering food more enjoyable for me
Technology Anxiety	I hesitate to use online ordering for fear of making a mistake I cannot correct
	I feel apprehensive about using online ordering
	I have avoided online ordering because it is unfamiliar to me
	Technical terms sound like confusing jargon to me
Satisfaction	I am happy with the service of online ordering
	I am happy with the quality of the service of online ordering
Behavioral Intentions	I am likely to use online ordering in the future
	I will probably use online ordering again in the future
	I will tell my friends that they should use online ordering

Notes: The statements on control were adapted from Dabholkar (1996) and Collier and Sherrell. Convenience statements were based on research conducted by Seiders *et al.* (2007) and Collier and Sherrell. The statements on the need for interaction and Technology Anxiety were adapted from Meuter *et al.* (2005). Satisfaction and behavioral intention statements were adapted from Oliver and Swan (1989) and Collier and Sherrell (2010). Based on the Cronbach's alphas, the scales were all highly reliable (Control, .988; Convenience, .992; Need for Interaction, .957; Technology Anxiety, .960; Satisfaction, .991; Behavioral Intention, .985).

EXHIBIT 14

Perceived control and convenience of online ordering
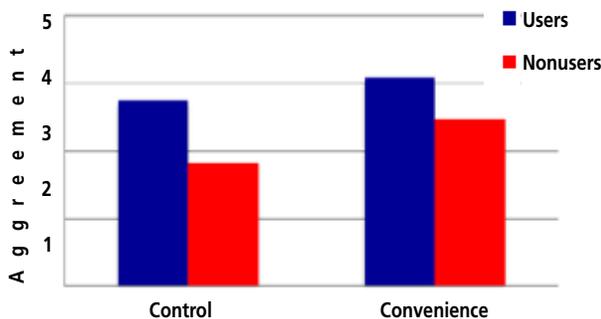
younger respondents had significantly higher perceived convenience scores than older respondents.

Need for interaction and technology anxiety. Non-users had a significantly higher need for interaction (non-users, 2.75; users, 2.25) and had significantly more technology anxiety (non-users, 2.97; users, 2.43) (Exhibit 15). While there were no significant differences by gender, older respondents had a significantly higher need for interaction.

Satisfaction and behavioral intentions. Users were significantly more likely to say that they would use or recommend online ordering (users, 3.88; non-users, 2.72) (Exhibit 16). Women were more likely than men to use or recommend online ordering in the future, while younger respondents were significantly more satisfied with online ordering than older respondents were.

Predicting Future Use

I was interested in developing a model to predict whether someone was likely to use online ordering. I developed two different models: one for users and one for non-users.

I first calculated the correlations of control, convenience, technology anxiety, and need for interaction with users' and non-users' behavioral intentions (Exhibit 17). Users and non-users with a higher sense of perceived control were more likely to use or recommend online ordering in the future. A similar relationship held for perceived convenience; respondents with a higher level of perceived convenience were more likely to use or recommend online ordering.

Respondents with a higher need for interaction, on the other hand, were significantly less likely to use or recommend online ordering, and the same was true of users with higher levels of technology anxiety. There was no relationship between technology anxiety in non-users and intention to use online ordering.

Regression Models

I developed models to predict likelihood that users and non-users would use online ordering. The dependent variable was behavioral intentions, while the independent variables were control, convenience, technology anxiety, and need for interaction (Exhibit 18).

The model for users was quite robust (R^2 = .700). Their intent to use or recommend online ordering was primarily determined by perceived control and perceived convenience. The need for interaction and technology anxiety had no significant effect on this group's intention to use online ordering. Future use by non-users was determined by perceived control, convenience, and technology anxiety, but was negatively affected by the need for interaction (also a robust model; R^2 = .621).

EXHIBIT 15

Need for interaction and level of technology anxiety
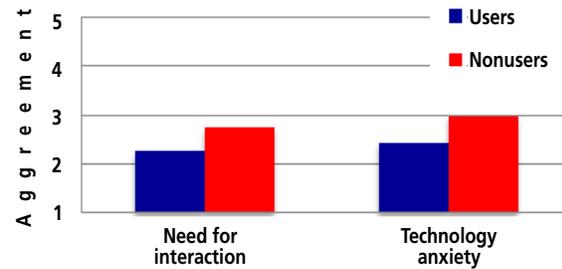
EXHIBIT 16

Satisfaction level and behavioral intentions
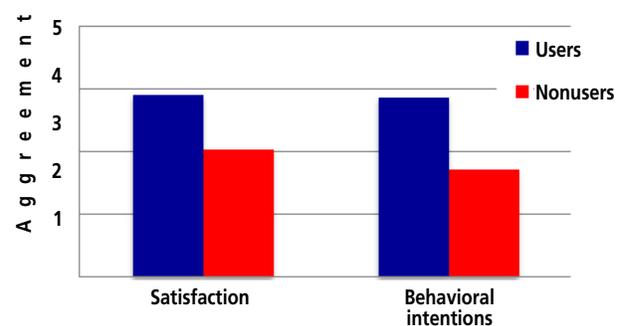
EXHIBIT 17

Correlations with behavioral intentions for users and non-users

	Users	Non-Users
Control	.796**	.762**
Convenience	.767**	.568**
Technology anxiety	-.211**	-0.067
Need for interaction	-.232**	-.355**

Note: **Significant at $p < 0.01$; *Significant at $p < 0.05$

EXHIBIT 18

Regression model for users and non-users

	Users	Non-Users
	Variable (Beta)	Coefficient (Beta)
Constant		
Control	0.488**	0.611**
Convenience	0.398**	0.139*
Technology anxiety	0.015	0.109*
Need for interaction	-0.016	-0.252**

Note: **Significant at $p < 0.01$; *Significant at $p < 0.05$

Based on the regression models, users will be more likely to use online ordering if they have a greater sense of control and convenience. Operators should focus on ways of providing those features. While control and convenience are also important to non-users, operators should concentrate on ways to provide the interaction that non-users desire. In the next section, I will discuss ways of doing this.

Discussion

Given findings presented in the first report in this series (namely, that online orders help reduce costs, increase accuracy, increase repeat orders, provide good customer information that can be used to develop targeted promotions, and have a higher average check[15]), it behooves savvy restaurant operators to do what they can to increase the percentage of online orders. The question is how to do this.

This study has shown that perceived control and convenience are keys to customer use of online ordering for both users and non-users. Increased perceived control and convenience leads to higher satisfaction with online ordering and a higher likelihood that a customer will use or recommend online ordering. To encourage non-users to try online ordering, a restaurant needs to take into account their need for interaction, which has a significant effect on satisfaction and intent to use or recommend online ordering. I suggest this because of the finding that respondents with a high need for interaction and high technology anxiety are less likely to use it or recommend it.

My findings indicate that restaurant operators should focus on giving their customers higher levels of perceived control and convenience, since these are associated with a higher intent to use online ordering in the future. The following are some approaches that restaurants should consider adopting.

One clear way to increase perceived control of online ordering is by offering choices, so that your guests can easily customize their order, choose their payment method, and determine their delivery options. Making sure that the online site or app gives customers the ability to choose what they want in an unrushed manner can also help with increasing perceived control. In addition, letting customers choose when they want to order or how they want to get their order (that is, delivery, takeout, or eat-in) will also increase perceived control. So, your online site or mobile app should always be available to accept orders for any meal period.

Other ways to increase perceived control are to give visible reassurances that the customer's order will be (**1**) safe and secure, (**2**) accurate, and (**3**) delivered when promised. This can be done in a number of ways.

(**1**) Security can be emphasized by highlighting your payment card industry standards (PCI) compliance, by providing a graphic that indicates that credit cards are safe (e.g., Verisign), and by stating that customer information will not be shared with outside companies.

(**2**) Order accuracy can be emphasized by:

    (**a**) Listing the items in the order on the side of the screen so the customer can see the "shopping cart";

    (**b**) Allowing customers to review, change, and confirm their order before submitting it;

    (**c**) Sending an email or text confirmation that lists the ordered items; and

    (**d**) Providing a printed copy of the order in the customer's food package.

(**3**) Finally, trust in the delivery time can be increased by:

    (**a**) Giving an accurate estimate of how long it will take;

    (**b**) Letting customers see the progress of their order (similar to Dominos.com); and

    (**c**) Sending them an email or text telling them that their order is either out for delivery or will be available for pick-up in a certain number of minutes.

Increase Perceived Convenience

To ensure your customers' perceived convenience, make your electronic ordering system easy to use and easy to navigate. Have clear guidelines on what customers are supposed to do, so that even new customers can intuitively use your site like "regulars." Letting customers save their favorite orders and just click a button to repeat an order can go along way in increasing perceived convenience. Similarly, give customers the ability to save their address and payment preferences so they do not have to enter this information every time they order.

Another way to increase convenience is to offer a dedicated pickup line or location for online, mobile, and text takeout orders. Chipotle has done this with great success.[16] Customers will appreciate not having to wait, and other waiting customers may be motivated to try electronic ordering.

Manage the need for interaction. We now know that non-users have a much higher need for interaction than electronic order users do. Some of these customers will probably never want to use online ordering, but you could offer other channels. Depending on the size of your restaurant or chain, you might want to consider using a call center that can take orders and also provide the same consistent

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[15] As explained in more detail in part one of this series. See: Kimes and Laqué, *op.cit*.

[16] Chipotle Investor Relations, "Chipotle Customers Can Get Out of Line by Going Online," http://phx.corporate-ir.net/phoenix.zhtml?c=194775&p=irol-newsArticle&ID=1218202&highlight=, viewed December 26, 2010.

upselling and customer relationship management information as a website or mobile app.

Reduce technology anxiety. Although personal contact seems to be the major issue for non-users of electronic ordering, they do have significantly higher technology anxiety than users do. To help reduce this anxiety, the fundamental steps are not that different from those that make the ordering process ideal for regular users. Most critically, the thing here is to make it easy to order, and to give frequent assurances that the order has been received, that the order is accurate, and that the order will be delivered or available when promised. Once you've made sure that ordering is easy, encourage your customers to try electronic ordering. Display signs highlighting your online or mobile ordering capabilities, mention it in your advertising, and offer incentives to customers to try it. Once customers try electronic ordering, they are more likely to view it as useful.[17] You might also emphasize that customer help is readily available, either by rapid response to email or by phone, if someone gets hung up when they're trying it. Another option would be to have online chat available to help customers figure out what went wrong if they get hung up. One other approach might be to set up a kiosk in the restaurant where an employee helps people try out the ordering site so that they can see how it works and how easy it is.

Whom to target. As discussed above, electronic ordering frequency varies by age and gender. Younger customers (particularly those between 25 and 39 years of age) are more likely to use online, mobile, or text ordering. Younger customers place a greater value on convenience and speed than older users do. If you're going after this market segment (and you should), make sure to make it easy and fast for them to place an order. Targeting your campaign at younger customers should prove useful not only for right now but for the future. Communicate with them in the way they communicate with each other—by text or through mobile coupons.

Older customers (aged 50 and older) reported that they have a higher need for human interaction. You still might be able to encourage them to try online ordering, but you also should make sure that your restaurant can respond effec-

tively to telephone calls, including a call center that provides human interaction, as I suggested above. Alternatively, focus your efforts on women since female respondents were much more likely to have used electronic ordering than male respondents.

Female customers are more frequent users of electronic ordering generally, and value the associated convenience and control. In your promotions to women, emphasize the control and choices that they will have if they use online or mobile ordering. In addition, stress how quickly they will be able to place their order and then get on with their busy lives.

Summary and Conclusion

This study found that online, mobile, and text ordering is reasonably popular among U.S. residents who use the internet, given that nearly half of the survey respondents had placed a restaurant order using an electronic channel. The perceived control and perceived convenience associated with electronic ordering were important for both users and non-users, but the non-users had a significantly higher need for personal interaction and also had higher technology anxiety than the users did.

This tradeoff between convenience and the need for interaction is interesting from both a research and practical perspective. Researchers have not thoroughly studied this tradeoff. From a managerial standpoint, the question is how to enhance the perceived convenience associated with electronic ordering while at the same time providing the need for interaction that certain market segments desire. The suggestions made here are intended to help managers grapple with that issue.

As with all studies, this one is not without limitations. The study was only conducted in one country (USA), and the findings might not be generalizable to other parts of the world. Although the research was conducted with a representative national sample, it was conducted online, and respondents may have systematic differences from restaurant customers who do not use the internet. However, I must note in conclusion that this limitation makes my findings even more critical, since the survey determined that over half of the respondents, all of whom use the internet, don't place electronic food orders. This doesn't include people who aren't using the internet at the moment. Thus, we can conclude that the potential for online or mobile ordering has barely been tapped. ■

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[17] Michael J. Dixon, Sheryl E. Kimes, and Rohit Verma, "Customer Preferences and Use of Technology-Based Service Innovations in Restaurants," *Cornell Hospitality Report*, Vol. 9, No. 7 (2009); Cornell University Center for Hospitality Research.

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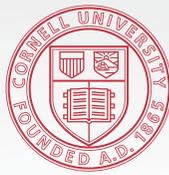
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