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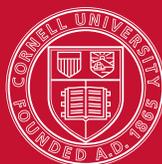


## Measuring the Dining Experience: The Case of Vita Nova

### Cornell Hospitality Tools

Tool No. 12, February 2009

by Kesh Prasad and Fred J. DeMicco, Ph.D.



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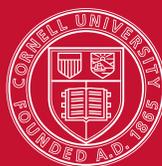
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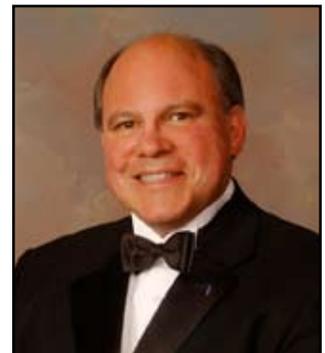
## ABOUT THE AUTHORS



**Kesh Prasad** is a former director, hotel practice at J.D. Power and Associates, and a former manager, consumer research for Promus Hotels, now owned by Hilton (kpr3321@aol.com). A management consultant, he runs the software startup that is the subject of this report, and is executive in residence in the department of tourism and hospitality management at the business school at George Washington University.

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## EXECUTIVE SUMMARY

**T**he considerable penetration of computers and internet connections makes it feasible to use electronic surveys to determine whether restaurant guests are satisfied with their meals. As demonstrated by the proprietary software in this case study, electronic surveys can provide rapid and effective feedback regarding guests' assessment of food and service. Beyond that, correctly designed electronic surveys can gauge customers' loyalty to a restaurant and raise warning signals when something is amiss. The demonstration takes place in Vita Nova, which is the teaching restaurant at the University of Delaware. Open only during academic terms, Vita Nova was expressly designed to teach restaurant students. Results of the survey showed that guests at this restaurant were highly satisfied and remarkably loyal, as calculated by a new measure, the Loyalty Power Index. This case study underscores the value of customer surveys in ensuring customer satisfaction.

# Measuring the Dining Experience: The Case of Vita Nova

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**W**hen restaurant guests leave a restaurant never to return, one question that arises is why those guests do not come back. While some guests seek the novelty of a different restaurant each time they dine out, others may have found something dissatisfying about a particular restaurant. Many restaurant operators use customer surveys to determine whether guests are satisfied with the restaurant's food and service quality, menu variety, and ambience. Winning back disaffected guests is an unlikely proposition, but learning about guests' reactions to the restaurant can assist in improving operations to earn the patronage of new guests. Moreover, upgrading operations based on guests' feedback can boost customer satisfaction and loyalty, which have been shown to increase profits.



At left: Vita Nova student team; above, the restaurant

In this report, we explain the electronic survey research application that we have developed for restaurants. Although this is proprietary software, we show how it is used in Vita Nova, the teaching restaurant at the University of Delaware, and we explain how it can be purchased. In the course of the discussion, we specify questions that should be asked and analyses that should be conducted. We believe that surveying customers is worthwhile for restaurants, due to the connection between customer satisfaction and improved profits.

### Conceptual Underpinning

Over the years, studies of customer satisfaction in different industries conducted by the American Customer Satisfaction Index project ([www.theacsi.org](http://www.theacsi.org)) have repeatedly shown that companies which do the best job of satisfying their customers earn more revenue, have better profits, and, in the case of publicly traded companies, have better price-to-earnings ratios than those with lower guest satisfaction.<sup>1</sup>

The importance of satisfied customers cannot be overstated. For instance, Michael Johnson and Anders Gustafson

wrote: “Over the last three decades business organizations have evolved from a focus on quality to a focus on customer satisfaction, and onwards to a focus on loyalty as a means of creating value.”<sup>2</sup>

Hotel chains have been using survey tools to track guest satisfaction and monitor quality among their properties at least since the 1980s. Based on an analysis of chains that have purchased the annual survey by J.D. Power, hotel brands with higher satisfaction scores tend to have better RevPAR than the brands with lower scores.<sup>3</sup> This is also true for restaurants, as demonstrated in a 2007 study published in the *Cornell Quarterly*. A Cornell research team used intention to return as a measure of customer satisfaction, linking that to increased sales. The factors that drove customer satisfaction in that study were delicious food, an appropriate cost, a cheerful greeting, and attentive service.<sup>4</sup> That study

<sup>1</sup> Claes Fornell, David Van Amburg, Forrest Morgeson, Eugene W. Anderson, Barbara Everitt Bryant, and Michael D. Johnson, “The American Customer Satisfaction Index at Ten Years: Implications for the Economy, Stock Returns, and Management,” Ann Arbor, MI: Ross School of Business, 2005, p. 43.

<sup>2</sup> Michael D. Johnson and Anders Gustafsson, *Improving Customer Satisfaction, Loyalty, and Profit: An Integrated Measurement and Management System* (San Francisco, CA: Jossey-Bass, 2000).

<sup>3</sup> Chekitan Dev and Kesh Prasad, “Model Estimates Financial Impact of Guest-satisfaction Effort,” *Hotel and Motel Management*, August 1, 2002, [www.hotelmotel.com/hotelmotel/article/articleDetail.jsp?id=28217](http://www.hotelmotel.com/hotelmotel/article/articleDetail.jsp?id=28217).

<sup>4</sup> Sachin Gupta, Edward McLaughlin, and Miguel Gomez, “Guest Satisfaction and Restaurant Performance,” *Cornell Hotel and Restaurant Administration Quarterly*, Vol. 48, No. 3 (August 2007), pp. 284-298.

# Electronic surveys can facilitate systematic collection of information on a restaurant's food and service quality, as well as guest loyalty.

supports our contention that management should concentrate on the specific factors that contribute to customer satisfaction.

Although the American Customer Satisfaction Survey, which we just mentioned, includes an index for restaurants,<sup>5</sup> it is at an aggregate level. To focus on specific restaurants, we wanted a more detailed, research-based approach to assess how guests view a restaurant. The 2007 Cornell study begins to establish a relationship between satisfaction and loyalty or repeat business with a survey-based mechanism. We believe that restaurant guests should be surveyed shortly after their dining experience to gain the most accurate assessment of their experience. Although our case study deals with a stand-alone restaurant, we see a use of this kind of survey for multi-unit restaurant operations, which could conduct surveys at every location throughout the year to assess comparative levels of operational consistency and guest satisfaction.

Many restaurants use paper surveys to measure guest satisfaction, with survey forms included with the guest check, dropped on the table by servers, or set up with table tents. Paper surveys, however, are cost prohibitive and unreliable. Since the respondent pool is self-selected and represents a small percentage of customers, the data are suspect. Worse, paper surveys are open to cheating. Employees might fill them out, and managers could throw away "bad" evaluations, unless the surveys go to an impartial tallying agency.

## Changing Guest Behavior and Intensifying Competition

Changing guest preferences can undermine even a well-run restaurant. Too many restaurants use only cover counts and sales volumes as gauges for customer satisfaction and preferences. Those are critical ratios, but survey research allows restaurateurs to monitor changes in guest preferences and dining styles before cover counts drop. Few restaurants

<sup>5</sup> For example, ASCI issued ratings for Pizza Hut, Papa John's, McDonald's, KFC, Taco Bell, and Burger King in a May 2008 press release. See: [www.theacsi.org/images/stories/images/news/0508Q1.pdf](http://www.theacsi.org/images/stories/images/news/0508Q1.pdf).

succeed indefinitely, because guests' tastes change and new competitors continually appear. Although we realize that restaurants fail for many reasons not related to guest satisfaction, it's clear that no restaurant can succeed without satisfying customers.<sup>6</sup>

Logically, any restaurateur would seek to keep a restaurant's food and service quality as high as possible (given the operation's financial constraints and objectives) and offer guests an excellent dining experience every time, without service failures. We recommend that information on these issues be collected regularly and systematically.

## Technology to Measure Experience Satisfaction

Our survey methodology relies on internet and web technology. Electronic surveys have dramatically changed the nature of survey methodology. We consider electronic methods to be better, faster, and cheaper than either paper- or telephone-based methods. Properly constituted surveys allow respondents to complete the survey at their convenience on a secure web site. Unlike paper surveys, if a guest decides not to do the survey, no cost is incurred beyond the initial setup.

We must note that the argument in favor of a software-based survey tool rests on the assumption that most people who patronize casual-dining restaurants either own or have access to a computer and to the internet. A Pew research study reported that in 2007 some 80 percent of U.S. residents owned a computer or had access to computers at work, school, or a library, and the same study estimated that 78 percent of U.S. residents go online at least occasionally.<sup>7</sup> Given those statistics, we believe that a web-based tool is not demographically biased, or at worse, we can say that it prob-

<sup>6</sup> See: H.G. Parsa, John T. Self, David Njite, and Tiffany King, "Why Restaurants Fail," *Cornell Hotel and Restaurant Administration Quarterly*, Vol. 46, No. 3 (August 2005), pp. 304-322.

<sup>7</sup> A. Kohut, R. Wike, J.M. Horowitz, "World Publics Welcome Global Trade—But Not Immigration," *The Pew Global Attitudes Project*, Pew Research Center, October 4, 2007 ([pewglobal.org/reports/pdf/258.pdf](http://pewglobal.org/reports/pdf/258.pdf)), pp. 73-78.

ably gives a fair representation of the population patronizing casual dining restaurants.

### Studying Vita Nova

Supported by an ARAMARK grant, we developed a web survey for Vita Nova, the student-run teaching restaurant at the University of Delaware. Using the Active Server Pages (ASP) script engine from Microsoft, we developed a web survey tool that we called Restaurant Quality Management System or QMS. We used ASP because it is freely available, and our idea was that the solution should not require any investment in hardware or software.

In the remainder of this report we show our analysis of the data thus collected for Vita Nova during the 2006–07 academic year and examine key metrics for measuring performance excellence. Using those success metrics we develop the concept of a Loyalty Power Index, which we believe would be useful for the restaurant industry. Throughout this report we offer screen captures to demonstrate the available QMS reports based on the survey data.

### Vita Nova

The fifty-seat Vita Nova restaurant is a fully functioning facility expressly designed to teach students to manage a restaurant. Started in 1998, Vita Nova is positioned as an upscale casual-dining restaurant and has earned a solid reputation in Newark for food and service quality. Vita Nova operates only when the university is in session, but it otherwise functions like any commercial restaurant. Students majoring in the University of Delaware's restaurant management program rotate through fifteen positions, including line cook and restaurant manager, to learn all aspects of restaurant operation. Restaurant classes meet on the premises when the facility is not open to the public. In addition to the restaurant, the facility includes the adjoining Darden Bistro, which focuses on wine and tapa-type menu items. As a teaching tool for students, the restaurant has asked its customers to fill out paper comment cards, but that system was replaced in August 2006 with the QMS web survey system.

### QMS Procedure

When the student server drops the check at the end of a meal, every guest also receives the attractively printed invitation card shown in Exhibit 1. Based on the restaurant's annual cover counts, the students distributed 1,400 such cards for lunch and 800 for dinner. In the academic year 2006-2007, a range of just under 30 to over 50 guests each month accepted the invitation soon after their restaurant visit, usually in no more than four days. Thus, we had a response rate of over 12 percent, which we consider to be fairly strong. The web address on the card opened the Vita Nova web page with the "take a survey" button, as shown in Exhibit 2. Those who clicked that button found themselves at the questionnaire in Exhibit 3 (next page).

#### EXHIBIT 1

### Sample web survey invitation card



Thank you for dining at Vita Nova  
We now request you to give us your feedback by going to

<http://www.hrim.udel.edu/vitanova/>

and clicking on Take A Survey button. Completing the survey would enable you to enter for our monthly draw for a complimentary 3-course dinner for two.

Once again—thank you.

#### EXHIBIT 2

### Vita Nova web page with "take a survey" button



**EXHIBIT 3**

**Questionnaire**

<b>Guest Satisfaction Survey</b>					
A restaurant run by students of the Hotel and Restaurant Management Program of the University of Delaware					
Thank you for dining at Vita Nova. Your feedback will help us maintain and enhance our high standards. Please tell us how would you measure our performance.					
	Poor		Fair	Excellent	
	1	2	3	4	5
1. Handling of reservations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Was your reservation confirmed		Yes <input type="radio"/>	No <input type="radio"/>		
3. Were you placed on a waiting list?		Yes <input type="radio"/>	No <input type="radio"/>		
	Poor		Fair	Excellent	
	1	2	3	4	5
4. Menu offering	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Quality of food	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Portion size	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Presentation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Quality of service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Overall atmosphere/ambiance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Comfort level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Overall satisfaction with the dining experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. What would you like to see added to or removed from our menu?					
14. Have been here before? Yes <input type="radio"/> No <input type="radio"/>					
15. If "Yes," how many times have you been here in the last 6 months? Once <input type="radio"/> Twice <input type="radio"/> Three Times <input type="radio"/> More than Three Times <input type="radio"/>					
16. If "No," how did you first hear about us? Word of Mouth <input type="radio"/> Radio <input type="radio"/> Newspaper <input type="radio"/> Other <input type="radio"/>					
17. Please provide the name of your server, if possible, and any other comments.					

	Definitely No	Maybe	Definitely Yes	
	1	2	3	4 5
18. Would you return to Vita Nova soon?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. Would you recommend Vita Nova to others?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. Your Salutation	Mr. <input type="radio"/> Mrs. <input type="radio"/> Ms. <input type="radio"/> Dr. <input type="radio"/>			
21. Your First Name*				
22. Your Last Name*				
23. Check Number*				
24. What is your postal zip code? *				
25. Email Address (Optional)*				
26. Date of Visit (mm/dd/yyyy)*				
27. You visited us for ...	Lunch <input type="radio"/>	Dinner <input type="radio"/>	Darden Bistro <input type="radio"/>	
* Required for verification and for you to participate in our monthly "lucky draw."				
Thank You.				
Submit				Reset

When the guest completed the survey by hitting the submit button, the system would send instant feedback to the student manager via email. The feedback reports the scores on the completed survey, as shown in Exhibit 4. In the case of a bad rating, the manager can contact the guest to apologize for the poor experience and try to make amends. This facili-

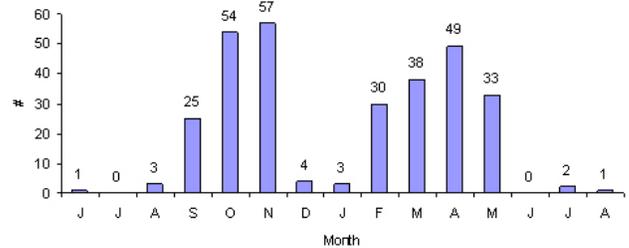
**EXHIBIT 4**

**Instant feedback form**

<p style="text-align: center;">Vita Nova - Customer Card</p> <p style="text-align: center;">Survey Date: 7/16/2006</p>					
1. Have been here before?	Yes	No			
	<input checked="" type="radio"/>	<input type="radio"/>			
2. If "Yes," how many times have you been here in the last 6 months?	1	2	3	4	5+
	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. If "No," how did you first hear about us?	Word of Mouth	Radio	TV Only	Other	
	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
4. Handling of reservations	1	2	3	4	5
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Was your reservation confirmed?	Yes				No
	<input type="radio"/>				<input type="radio"/>
6. Were you placed on a waiting list?	Yes				No
	<input type="radio"/>				<input type="radio"/>
	Poor		Fair	Excellent	
	1	2	3	4	5
7. Menu offering	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Quality of food	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
9. Portion size	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
10. Presentation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
11. Quality of service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
12. Overall atmosphere/ambiance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
13. Comfort level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
14. Overall satisfaction with the dining experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
15. If you would like to see added to or removed from our menu?					
16. Please provide the name of your server, if possible, and any other comments. I don't remember his name, but he had been an intern with a winery in the Napa Valley. He is a conor and was very knowledgeable and personable. We didn't make a reservation - just showed up at the Tap at Bar. We were seated quite fairly.					
17. Would you return to Vita Nova soon?	Extremely Would Not	Yes	No		Definitely Would
	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		<input type="radio"/>
18. Would you recommend Vita Nova to others?	<input checked="" type="radio"/>				
If you rate Q 11 at 3 or lower, please explain why?					

**EXHIBIT 5**

**2006-07 survey response, by month**



tated by a reply button on the instant feedback screen that sends a message back to the guest. Almost all guests left an email address that allowed such instant replies.

**Analysis of Annualized Data**

In the first year of this test, Vita Nova was open during eight months of the 2006-2007 academic year. Since the monthly sample base was relatively small, we cumulated the data and added in responses that were received when the restaurant was closed to achieve a sample base of about 300 responses. The monthly response pattern is shown in Exhibit 5.

**Reports**

The system makes six reports available online in real-time to Vita Nova's managers, as follows.

**Alert**—Shows responses by day and month-to-date for surveys where the respondents had problems (bottom-2 box and bottom-3 box);

**EXHIBIT 6**

**Guests' comments about staff—April 2007**

<b>Date of visit</b>	<b>Comments about staff members</b>
04/05/2007	It is always a great time when we come. The conversations with the servers are great.
04/06/2007	Our captain was [Server Name]. She and the entire staff were excellent. This was probably the best overall staff we have seen in our three years of regular dining at Vita Nova.
04/09/2007	[Server Name] was extremely pleasant and friendly. Service was top-notch.
04/09/2007	[Server Name] was very helpful and friendly. Our assigned waiter never came to us and we waited a long time before [Server Name] came and offered to help us.
04/10/2007	It was a good dining experience the three times I was there. My companion during the third time somewhat felt uncomfortable with "too much attention" from our server, but I do understand why, so I didn't mind.
04/10/2007	[Server Name] was our server. She was pleasant, friendly and overall she did a great job.
04/11/2007	Very good experience! Including the dessert as the 4th course was great!
04/12/2007	[Server Name] (not sure of the spelling) was an excellent server and very knowledgeable regarding today's menu and explained the course structure of this facility and the rotation process.
04/12/2007	[Server Name] was very polite and considerate. Served food and beverages well.
04/13/2007	Service was great and the overall experience was wonderful. However we did have to keep asking for water refills and after waiting to have our wine glasses refilled, we refilled them from our bottle of wine ourselves.
04/18/2007	[Server Name] was our server. It was my mother's birthday and she took great care of her for her Birthday. She was very pleased with the service. Thanks for making her 78th Birthday so special.
04/18/2007	We ordered a bottle of wine and noticed the server was having some difficulty opening the bottle. Oddly enough, the previous 2 times we dined at Vita Nova, this same thing occurred. Maybe your wine servers require some training?
04/19/2007	It was a pleasure to be served in all areas of our dining experience by such dedicated students.
04/19/2007	[Server Name] spoke too softly—hard to hear him.

**EXHIBIT 7**

**Guests' suggestions**

<b>Date of visit</b>	<b>Suggestion</b>
03/01/2007	Filet Entrée for one person. Also, the Veal Chop was just OK and the mashed potatoes were not good at all. Soup was excellent and desserts were just OK as well.
03/02/2007	More dates into the summer, but I know you do not have students.
03/02/2007	We thought the breadsticks were just passable, nothing special. Also, I would recommend just lightly heating the Hazelnut crepes before serving them. Other than that, we thought the entire meal was wonderful. Our visit was on Wed. Feb. 28.
03/02/2007	Dipping oil for breads.
03/07/2007	No changes at this time.
03/08/2007	Maybe another fish option...but there really are a lot of great choices!
03/08/2007	Steamed vegetable could be replaced with another vegetable.
03/09/2007	Suggestions: serve smaller portions of salads—wonderful, but need to focus on entrée. 4 entrées quite good, suggested improvements: risotto too sweet and unappealing appearance. Crêpes with lobster need to be more delicate—lighter and thinner.
03/09/2007	Everything was excellent.
03/09/2007	I think the menu is fine; there is a nice mix of carbohydrates and proteins.
03/10/2007	I haven't seen the 2007 menu yet, but I like to order things that are not practical to make at home due either to necessary size (rack of lamb for one) or amount of prep time.
03/13/2007	Veal removed.
03/14/2007	More Crème Brûlée—you ran out before we were finished our meal (reservation was 12:30).
03/15/2007	Mineral water.
03/22/2007	I miss the little grilled tomatoes.
<b>Control</b> —Shows all responses by day and month-to-date to closed-ended questions (top-box and top-2 box);	
<b>Trend</b> —Shows all responses by month to closed-ended questions and includes problem diagnostics chart;	
<b>Staff Recognition</b> —Shows when guests have taken the opportunity to name an outstanding wait person (see Exhibit 6);	
<b>Suggestions</b> —Lists all suggestions made by the respondents for improvement of service or the sales experience (see Exhibit 7); and	

**EXHIBIT 8**

**Response database**

Vita Nova Guest Response Database with Rating																										
Apr - 2007																										
Question No.																										
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	
Yes	3		4	Yes	4	4	4	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Yes	1		5	Yes	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
Yes	3		5	Yes	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
Yes	4		5	Yes	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
No	1		4	Yes	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
Word of Mouth																										
Yes	4		5	Yes	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
Yes	2		4	Yes	2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
Yes	4		5	Yes	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
No	1		5	Yes	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
Word of Mouth																										
Yes	2		5	Yes	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
Yes	1		5	Yes	2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
Yes	1		5	Yes	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
Yes	1		5	Yes	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
No	1		5	Yes	2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
Word of Mouth																										
Yes	1		5	Yes	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
Yes	1		5	Yes	2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
Yes	3		5	Yes	2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
Yes	2		5	Yes	2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
No	1		5	Yes	2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
Other																										
Yes	1		4	Yes	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
Yes	1		5	Yes	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
Yes	1		5	Yes	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
Yes	1		5	Yes	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
Yes	1		5	Yes	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
No	1		5	Yes	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
Word of Mouth																										
Yes	2		5	Yes	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	

*Response Database*—Shows all responses to all questions in a tabular format, including text comments that can be exported into Excel for further processing for advanced statistical analysis (Exhibit 8).

**Lessons from Vita Nova**

The restaurant earned high ratings from its guests. Some 97 percent gave an overall satisfaction rating of 4 or 5, where 5 is excellent (see Exhibit 9). Thus, the students seem to be doing a good job in this restaurant. Not surprisingly, then, nearly all guests said that they would return and would recommend the restaurant to others (Exhibit 10). We know that a 100-percent return rate does not happen in reality, but this particular enterprise has remarkably loyal supporters. We note the possibility that people do not want to be too critical of students-in-training and may slant their responses upwards because of their desire to

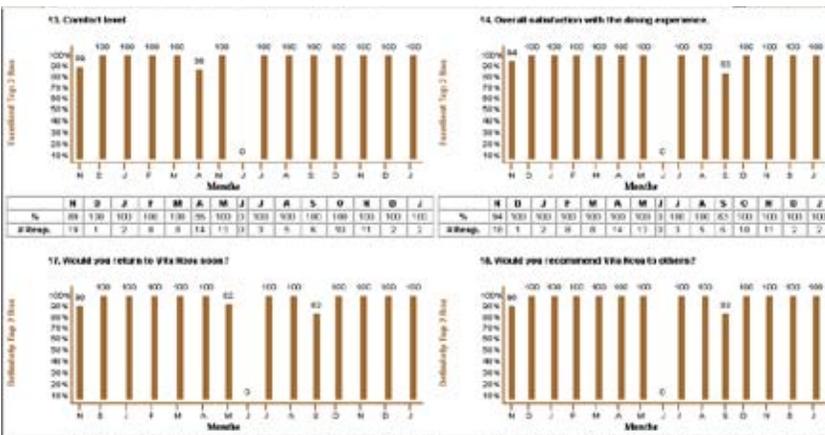
help the students. Considering the comments listed in Exhibits 6 and 7, we doubt that guests suspend their honest judgment. It's also possible that their expectations are low because it's a student restaurant. We think the latter is not the case, at least, since the survey tool found that nearly 68 percent of the guests surveyed had previously been to Vita Nova (see Exhibit 11). Moreover, 88 percent said that they would "definitely" return.

It appears that a substantial number of guests visit Vita Nova repeatedly (see Exhibit 12). Sixteen percent of the guests on this survey had been to the restaurant at least three times in six months prior to the visit recorded in this survey.

**Word of mouth.** Among the 32 percent of guests on their first visit, the graph in Exhibit 13 shows that in some months all guests had first heard about Vita Nova via word of mouth, and in other months the tally for word-of-mouth guests was never less than 60 percent, for an average of 77 percent. This worked out to be about 25 percent of the total sample. By adding that 25 percent of the total sample to the 68 percent who are returning guests, we could roughly calculate that 93 percent of the covers in the sample were attributable to loyalty and related behavior.

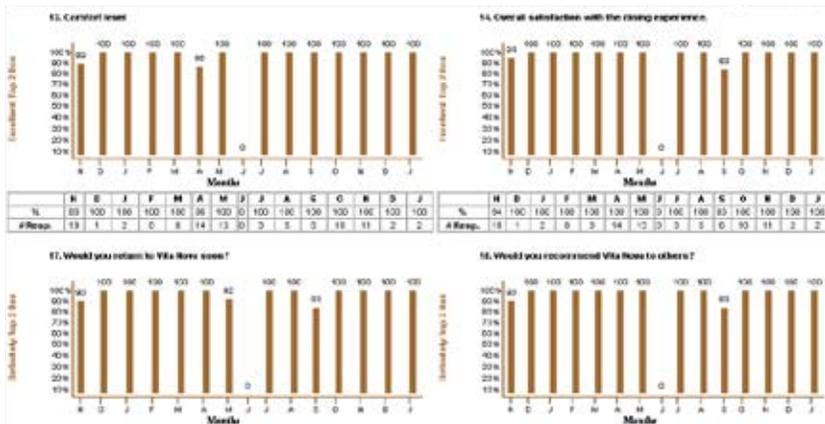
**EXHIBIT 9**

**Monthly trend report—Excellent top 2 box**



**EXHIBIT 10**

**Return intent**



## Advanced Analytics

Finally, the survey tool gives a summary of the Vita Nova statistics, which can be easily copied or exported to other databases for performing advanced analytics such as multiple regression and driver analysis (see Exhibit 14). Data such as these allow deep analysis of consumer behavior.

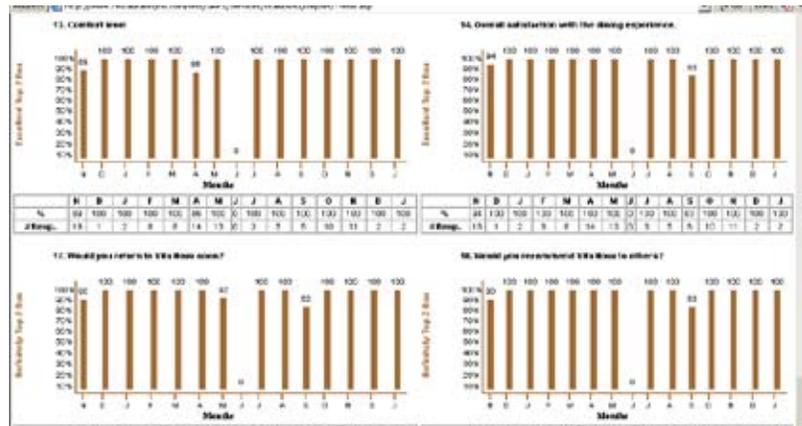
## Conclusion and Observations

The Vita Nova restaurant is a student-managed learning laboratory. The restaurant operates as a real business where students apply theory learned in the classroom to running an actual business. The environment of the restaurant provides a structure to apply guest-services management techniques in a live setting. Because it is a functioning restaurant, Vita Nova is treated as a retail center where budgets must be made and profit achieved. Looking at the comments about the individual servers (in Exhibit 6), we note that the comments are almost entirely complimentary. We suggest that this outcome debunks the belief that surveys attract a disproportionate number of negative comments. However, we must also acknowledge that these guests are aware that students run this restaurant, leaving open the possibility of a positive bias to their responses. The relationship of guests to student workers is demonstrated in the helpful suggestions found in Exhibit 7.

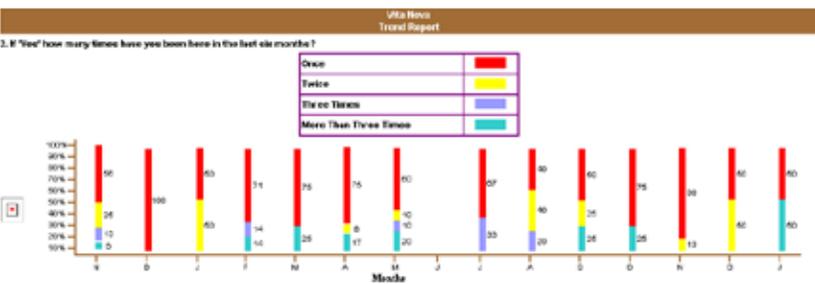
**Knowledge, insight, and action.** The case study leads to the following conclusions. Capturing data electronically generates considerable objective knowledge about restaurant consumer behavior. While academics could use the data to conduct various types of sophisticated data analysis and build some predictive models, restaurant owners and managers could use the tool to monitor excellence in dining experiences and to foster guest loyalty.

Measuring excellence from the guests' perspective. The case study also demonstrates that this tool works well over time and provides robust data. Vita Nova thus offers a convincing example of what the key metrics for quality in dining experience could be, as shown below.

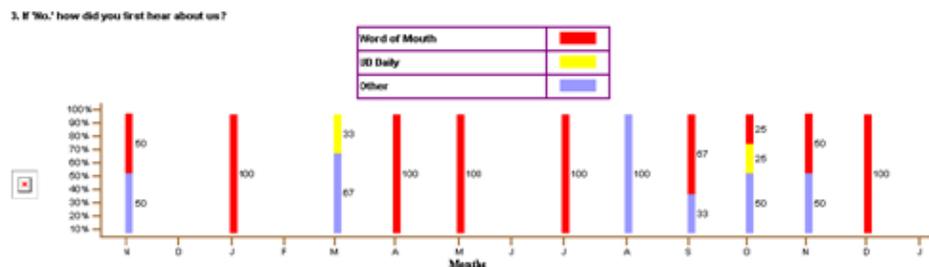
## EXHIBIT 11 Returning guests



## EXHIBIT 12 Guest loyalty



## EXHIBIT 13 Word of mouth referrals



## EXHIBIT 14 Sample variable analyses

Key guest metrics (n = 300)	Vita Nova Rating
1. Food quality—top box	76 percent
2. Service quality—top box	76 percent
3. Returning guests	68 percent
4. First-timers	32 percent
5. Word of mouth among first-timers	77 percent
6. Word of mouth among all guests in the sample	25 percent
7. Guests' overall satisfaction as excellent-top box	79 percent
8. Return definitely—top box	88 percent
9. Recommend to others definitely—top box	92 percent

# The Loyalty Power Index measures loyalty based on the word-of-mouth and returning-customer data.

## Restaurant Loyalty Power Index (LPI)

We believe that these data permit us to develop a new measure to assess loyalty based on the word-of-mouth and returning-customer data found in our survey. We call this the restaurant Loyalty Power Index (LPI), and it would be calculated by summing the returning guest percentage with the percentage of those first timers or new guests who heard about the restaurant from friends and family (as we did above). We believe that sharing word of mouth and repeatedly visiting a restaurant are indicators of loyalty behavior.

Looking at Vita Nova's LPI of 93, we believe any LPI above 90 is excellent, since 100 is a perfect score. An LPI of 80 to 89 could be called "good," and so on down. This would make comparisons possible resulting from a standardized LPI survey.

We feel that LPI is a new concept to measure loyalty. It stands for the power of a restaurant or a hotel or a brand to attract loyal guests measured by what the customers say about their behavior and not by attitude. This concept is worth a serious consideration by both academics and practitioners.

## A Commercial Application

Many researchers have tried to estimate lifetime value of a guest by calculating the revenue contributed by a guest in a particular year times the number of years in a lifetime.<sup>8</sup> We see no practical way to make this actual calculation, but in offering our QMS to the restaurant industry, we argue that its cost is far exceeded by the benefits of determining customers' assessments of a restaurant and finding a Loyalty Power Index. This case study describes in some detail how the QMS web survey operates. A survey similar to that used for Vita Nova would typically have a one-time cost of \$400 to \$600 for building the database and web survey. Depending on the number of respondents, running the survey would cost approximately \$30 per month for the subscription to survey data and analytics.

**Final thoughts.** Readers are invited to send us their comments, thoughts, and ideas. We believe that the industry can definitely benefit from the web survey in measuring delivery of excellence in dining. ■

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<sup>8</sup> Keiser *et al.*, *op.cit.*

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