Hospitality Review Volume 21 Issue 1 2003

Keywords
Michael Kasavana, Asia, Employees, Satisfaction, Major, Cruise, Sustainabilities, Woo Kim, Food and Beverage, A.J. Singh, Finance, Service Learning, Growth and Developments, Air Crafts, Challenges, Food Science, Matt Casado, Education, Joan Remington, Asia, FIU

This full issue is available in Hospitality Review: https://digitalcommons.fiu.edu/hospitalityreview/vol21/iss1/11
MASTER OF SCIENCE IN HOSPITALITY MANAGEMENT
Executive Master's Track Distance Program

THE SCHOOL OF HOSPITALITY MANAGEMENT
FLORIDA INTERNATIONAL UNIVERSITY

For More Information Contact:
Dr. Joan Remington
305-919-4500
inter@fiu.edu

http://hospitality.fiu.edu/executive_masters
Relevant Professional Education

“These are the times that try men’s souls.” Thomas Payne’s insight is as cogent today as it was in 1774. These are the times that try academic administrator’s souls with decreasing external support, shrinking foundation accounts and no student support for increased tuition. Enrollment growth in most hospitality and tourism programs has been flat at best. New programs are planned and opened by competing institutions which envision hospitality and tourism as growth vehicles. It seems to me that academia is emulating industry. Similar to industry, we cannot support the current business climate.

We at FIU’s School of Hospitality and Tourism Management (HTM) recognized the similarity of industry/academia scenarios. We have been significantly impacted by the post 9/11 restrictions on international students by the INS and are facing intensive intra-state rivalry as three sister state universities open new hospitality programs in addition to our traditional intra-state rival programs. Concurrently, FIU’s College of Business Administration (CBA) was faced with shrinking resources and the requirement to operate programs on two campuses separated by 35 miles of Miami traffic. Given the proposition that hospitality is a sub-set of business with some special applications, the provost challenged the two deans to develop a plan which assured the continuation of both units, the optimization of resources and the delivery of quality instruction on both campuses – University Park, home of the CBA, and Biscayne Bay, home of HTM. Fortunately, the Association to Advance Collegiate Schools of Business-International (AACSB) had just revised its accreditation standards, providing certain autonomous units within the CBA exclusion from review.

A plan was developed and implemented where the School of Hospitality and Tourism Management would become an autonomous unit within the College of Business Administration. The dean of HTM would continue to report to the provost and be a member of the Council of Deans as well as a member of the Presidential Council. The dean of HTM would also become the dean of business programs for the Biscayne Bay Campus, responsible for their management. This innovative solution utilizes the HTM faculty to deliver the undergraduate general business core while enabling a limited number of CBA faculty to deliver major courses. Both campuses have a dean responsible to the provost for the growth and management of business programs. The Biscayne Bay Campus gains four business majors with the same business faculty investment which had only been able to support one major. The School of Hospitality and Tourism Management avoids budget cuts and faculty reductions in the face of dwindling international student enrollment. It also receives an opportunity to recruit undecided business majors. A major plus is the presidential promise of a doctoral program housed in marketing, focusing on hospitality and tourism. This is the deal maker. We have already begun the process of developing the new doctoral program.

Is the plan an ideal solution? We think that it makes the best of a bad situation. We are in the process of implementing a schedule which requires us to interact with the departments of accounting, management and marketing. Life has gotten a little more complicated. Autonomy is an elusive concept which requires excellent communication and cooperation of all parties. These are times to re-examine the way we do business. Our peers in the hospitality industry are being forced to do it. And we are a reflection of them.

Joseph J. West, Ph.D.
Publisher
# Table of Contents

## V-commerce: Vending machine technology
by Michael L. Kasavana, NAMA Professor  
School of Hospitality Business  
Michigan State University ................................................................. 1

## Employee job satisfaction in major cruise lines
by Hsin-Hui Hu, Ph.D. student  
Ohio State University  
and  
Jinlin Zhao, Associate Professor  
and  
Cheryl Carter, Instructor  
School of Hospitality and Tourism Management  
Florida International University .......................................................... 10

## Survivorship in international chain restaurants in Korea
by Woo Gon Kim, Assistant Professor  
School of Hotel and Restaurant Administration  
Oklahoma State University-Stillwater  
and  
Kaye Chon, Chair, Professor and Head  
School of Hotel and Tourism Management  
Hong Kong Polytechnical University ..................................................... 22

## Website performance: Hong Kong hotels
by Rob Law, Associate Professor  
Information Technology  
School of Hotel and Tourism Management  
Hong Kong Polytechnic University  
and  
Tony Chung, Manager  
Hong Kong Newton Hotel ................................................................. 33

## Effect of agency problems on RTC hotel appraisals
by Michael C. Dalbor, Assistant Professor  
Department of Tourism and Convention Administration  
University of Nevada-Las Vegas .......................................................... 47

---

Contents © 2003 by FIU Hospitality Review.  
The reproduction of any artwork, editorial or other material is expressly prohibited without written permission from the publisher, excepting that one-time educational reproduction is allowed without express permission.
Guidelines for Authors

*FIU Hospitality Review* encourages submission of manuscripts on topics relevant to the hospitality industry. The following guidelines will assist authors in preparing articles for publication.

- E-mail submissions preferred. MS Word attachment. review@fiu.edu
- U.S. Mail submissions also accepted. Send to: FIU Hospitality Review, School of Hospitality and Tourism Management, Florida International University, 3000 NE 151 St., North Miami FL 33181. Printed manuscripts should be double-spaced in 12 point font. In addition, authors must include a diskette (3 1/2 inch), labeled with the author's name and the article's file name. Enclose two hard copies. Please use MS Word.

**The article should**
- provide a cover sheet with an article title and the name, title, school, address, telephone number and e-mail address of business affiliation of author(s).
- have a preface or abstract, usually two to three sentences, which summarizes the article. This is printed on the first page of the article prior to the body of the text.
- be written in the third person. The policy of the *FIU Hospitality Review* is not to print first or second person articles.
- include no more than five tables, charts or exhibits, with a preferred vertical format which must not exceed 35 lines in depth and 40 characters in width so each can fit on a single page.
- follow standard footnote/endnote format, which the *FIU Hospitality Review* runs as "References." Use consecutive numbers in the text and follow the style set forth in the MLA Stylesheet or Kate L. Turabian, *A Manual for Writers of Term Papers, Theses and Dissertations*, 6th ed., (Chicago: University of Chicago Press, 1996). The *FIU Hospitality Review* will not accept articles with internal footnote citations or textnotes. Do not include bibliographic references.
- range from 10 to 25 pages (2,500 to 7,000 words), with references and tables included.
- include major subheads within text; each should consist of a subject/verb construction and be short.
A popular auxiliary service provided by hospitality businesses is automatic merchandising, more commonly known as vending. Recent advancement in vending technology (v-commerce) has changed the way vending machines are monitored, replenished, maintained, and reconciled. As the hospitality industry searches to reduce its reliance on labor intensive processes, automatic merchandising represents an effective way to provide unattended points of sale and service. Smart machines featuring quality products with high levels of auditable control may be more appealing to the hospitality industry. While a hospitality manager does not need to have knowledge of the vending distribution channel or machine maintenance, it is important to understand available technology and the opportunity it provides for operational efficiencies and revenue enhancement.

The hospitality industry landscape features a collection of vending machines capable of dispensing snacks, drinks, toiletries, cameras, clothing, suntan lotions, and other products. Despite such popularity, there appears to be limited understanding or interest in the technology powering such applications. As hotels, restaurants, and clubs seek alternatives to the high cost and heavy dependence on manual labor, automated unattended points of sale should be considered. This article focuses on the technological advancements in the automated merchandising marketplace and the potential impact of these applications to the world of hospitality services.

Guest services enhanced

"In 2015, you won't need cash to score a Snickers. Just swipe a credit card, or a special debit card that works only in vending machines. Better yet, dial up the coffee machine from your cell phone and confirm that you'll be having your usual today: a double latte, skim milk, two packs of the blue stuff. It'll be ready moments before you arrive, the $3.50 charged to your phone bill." The potential impact of automatic merchandising on the hospitality industry may be significant as
innovative smart machines, seamlessly integrated with property management systems, possess the capability to enhance guest services while reducing labor costs and increasing profitability.

As the labor market remains challenging, hospitality management needs to consider alternative product delivery methods to maintain acceptable levels of guest service and profitability. Given the technological advancements in automatic merchandising and vending information systems (an area labeled as v-commerce), hospitality practitioners should consider applying vending equipment in innovative ways to meet or exceed guest expectations. For example, a hotel guest may insert a room key (rather than cash) into a vending machine and have the transaction automatically posted to a room folio. What about the delivery of upscale snacks or high-quality food service products via an automated machine? Consider the dispensing of extra pillows and towels or marketing health care and beauty products at strategic venues throughout the property. How about unattended breakfast monitoring and delivery mechanisms for budget hotels? What about the convenience and reliability of an un-staffed, 24-hour-per-day business center? Or a fully automated lobby gift shop? As the potential for these and other hospitality service applications becomes more apparent, automatic merchandising may be propelled into the forefront of hospitality business applications.

**Vending generates $41 billion**

Domestically, vending machines generated annual sales of nearly $41 billion in 2001, up from $22 billion in 1990, according to statistics compiled by the National Automatic Merchandising Association. During the past few years, the vending industry has experienced significant advancement in hardware, software, and netware. Wireless devices capable of tightly controlling cashless transactions at remote locations, application software that monitors inventory replenishment and audits sales activity, and network topologies that involve real-time and two-way communications are available. Historically considered a low-tech industry, the introduction of sophisticated automation techniques has revolutionized the automatic merchandising channel in the United States.

In Japan, a country with a long history of vending applications, machines are used to distribute everything from alcoholic beverages to batteries to underwear to train tickets to toilet paper to live beetles to instant noodles to cellular phones to fresh beefsteaks. Japan, with a population of less than half that of the United States, boasts nearly the same number of vending machines (5.6 million compared to 6.9 million). Recent Japanese developments include implementing smarter, more interactive machines capable of monitoring...
contests, performing cashless transactions, and networking with mobile phones. Such technologies are also beginning to emerge domestically.

V-commerce grows

V-commerce is the term used to describe the nearly unlimited range of advanced automatic merchandising technology applications available to the vending industry. V-commerce is capable of improving productivity and expanding operational services, and represents a platform for competitive advantage. It may be appropriate to move unattended points-of-sale to the mainstream of hospitality information system application, rather than let them remain a background operation.

While few hospitality managers have noticed improvements in vending machine reliability and efficiency, these developments can represent a significant cost containment strategy for the historically labor-intensive hospitality industry. As the hospitality services labor market remains competitive, replacement of staff with sophisticated unmanned distribution technology may appear attractive. In the vending industry, wireless communication and cashless transaction technologies are being implemented at an unprecedented rate.

While some vending operators have migrated to a cabled, network-centric system, the advancement of wireless technology has emerged as an attractive alternative. Wireless technologies possess tremendous potential for hospitality applications requiring mobility, flexibility, and reliability in enterprise-wide operations. Vending practitioners dissatisfied with the constraints and complexities of hard wiring are migrating to the convenience of design portability and user mobility that wireless technology solutions provide. Operators are starting to benefit from such devices as hand-held terminals, personal digital assistants, smart paging units, global positioning systems, telecommunication links (telemetry), proximity transponders, and related techniques. The critical ingredient enabling these technologies is a unique v-commerce communication standard referred to as DEX.

DEX provides advantage

DEX, which is short for Data EXchange, is a popular abbreviation for DEX/UCS (Data EXchange Uniform Code Standard). DEX communication technology provides the basis for significant technological advancement across the vending channel. Since DEX/UCS has received support domestically from the vending industry trade group, the National Automatic Merchandising Association (NAMA), and internationally from the European Vending Association (EVA), experts believe it will further facilitate a movement toward consistent data formatting.

The fact that vending equipment tends to be strategically placed in disparate locations presents a challenge to efficient replenishment, sales analyses,
malfunction notification, and comprehensive audit reporting. Fortunately, machine-level transac-
tional data can be captured through a computer control board installed within each vending machine. Aggregating machine-level data enables remote review of transac-
tions and inventory without having to have a physical presence at the machine. The fact data can be exported to a distant warehouse, headquarters or central operation, or product fulfillment center extends the opportunity for more thorough, immediate, and frequent analysis. Such applications are the result of DEX implementation.

In the past, machine manufac-
turers varied in how data exchanges and transmissions occurred. Edition 6 DEX software, (expected the first quarter of 2003), tightens the language of the protocol to prevent possible misin-
terpretations in accountability and brand identification and preference analysis. In other words, since there has been a proliferation of different vendable products, and several variations in the packaging of the same product, the DEX standard has been refined to acknowl-
edge and differentiate between product offerings.

DEX designers and equipment engineers now agree on a common linkage. While not all vending operators demand identical infor-
mational output, machines are equipped with data capabilities for delivering consistent reports. For example, common data set elements in the DEX standard include number of bills held in the bill stacker, quantity and denomi-
nation of coins stored in the coin box, machine product inventory status, and product sales tracking. Given recent DEX developments, coupled with the fact that vending machines have an average life of 10 years, it may take a generation of new machine installations to fully realize the DEX potential. Many industry practitioners claim DEX provides an indisputable, audible accounting method for actual cash collections, units sold, and product price.

**Data extraction developed**

During the past decade, NAMA and EVA adopted a communica-
tion protocol for the electronic retrieval of machine-level informa-
tion via data polling. As a conse-
quence, vending machines are now manufactured as DEX-enabled (or DEX-compliant). Basic DEX extraction includes sales, cash collections, product movement (sales mix), and related infor-
mation. DEX data retrieval can be accomplished via three distinct polling modes: local polling, dial-
up polling, or wireless polling.

Local polling incorporates a hand-held device (or pocket probe) designed to plug connect to a machine based DEX-port. Once plugged into the dedicated vending machine port, the hand-
held device automatically initiates the downloading of stored data. A local polling DEX download (machine to hand-held device) usually lasts about five seconds.
Field collected data is later transferred from the hand-held device to a central office computer for processing and analysis.

Dial-up polling (telephone line) and wireless polling enable remote access to DEX data without requiring a physical presence at the point of connectivity. Once a valid connection is established, DEX data can be collected for evaluation and analysis. While most DEX information centers on sales information, there are several important accounting elements. For example, how much cash should be in a machine at the close of a sales period? A route driver, unable to access the DEX electronic record, will have cash collections reconciled to the machine-level report.

**Exporting insures accuracy**

A DEX-compliant machine relies upon DEX architecture to enable vending machine polling. The vending machine exports its unique identification number and stored data to an external system for analysis and processing. An important element of this data stream is the machine’s service history, including the last date the machine was serviced. Once DEX data is exchanged with a vending management system, various transaction audits can be performed. Since captured data is not accessible or editable prior to interfacing to an auxiliary system, cash accountability will be accurate and complete. Also, the ability to track product information at the machine level enhances productivity, as machine fulfillment is improved and manual data entry eliminated.

The DEX protocol enables different makes and models of vending machines to communicate in a consistent manner. DEX data sets include sales mix, cash collection, product movement, and malfunction alerts. Additionally, DEX specifications contain a standard for reporting error codes for payment validation, dispensing jams, and other operational problems, all of which tend to rely on ASCII (American Standard Code for Information Interchange) text blocks for report generation.

From a sales perspective, DEX provides the vending operator with the ability to track brand and/or product preferences at the point of purchase. DEX has been found to improve sales performance, reduce operating expenses, and minimize machine malfunctions. In addition, DEX is capable of performing a space to sales analysis for machine-level column allocation optimization. This is an important outcome of a DEX-compliant device.

The main benefit of line item tracking is accountability and machine plan-o-gram (i.e., rotating menu of product offering) development. A DEX BuzzBox system employs a wireless transmitter installed at the vending machine that transmits machine-level DEX data to a receiver in the route driver’s truck called a BuzzBox, which may be equipped with a portable printer or hand-held computer and can be used to deter-
mine which machines at a sales location require service and which do not. In turn, the BuzzBox analyzes the imported data and generates a detailed pick list to assist the driver in determining machine restocking. All of this takes place prior to the driver ever entering the facility. Reducing trips from a route truck to the vending machine contributes to enhanced driver productivity and efficiency.

**Wireless operations effective**

Vending machine data can be collected using wireless protocols through radio frequency (RF) or telecommunication (WAN) transmission. A wireless transceiver and an accessible access point can be configured for remote data acquisition. Most vendors estimate that a single access point can serve a configuration of up to eight micro-controller-based vending machines. Wireless configurations typically are effective for a range of up to 150 feet indoors with captured data subsequently directed to a telephone landline for wide area communication. Basically, wireless transmission of DEX data may represent a cost-effective way for operators to dramatically increase sales while reducing operating expenses.

An alternate wireless application configuration involves telemetry modeling. Telemetry basically invokes a long-range remote control unit to monitor and regulate environmental conditions of a distant mechanical device (e.g., vending machine). Telemetry enables automatic measurement by wire, RF, or WAN. Telemetry systems act independently and automatically by adhering to a set of prescribed procedures. For example, when a vending machine inventory is nearing a par stock level of depletion, a message can be sent to the product supplier advising him of the condition. By eliminating the need to have a person check the machine inventory and ready fulfillment supplies, expenses are reduced, efficiency is enhanced, and product cycling is efficiently maintained.

From a financial perspective, a wireless system is relatively inexpensive to implement compared to the cost of field personnel and service vehicles and thereby has been shown to be highly reliable and productive in the vending channel. USA Technologies, a leading vending technology provider, offers remote, online auditing and monitoring capabilities that allow management to proactively maximize space-to-sales, minimize service stops per asset, and limit machine down time. By establishing connectivity between a bank of vending machines and the home office, it is possible to establish a two-way information flow enabling the downloading of sales data, inventory monitoring, and machine functionality and the uploading of price changes. There is no longer a need to perform administrative functions at the machine; such functionality can be accomplished virtually.
Consumers appreciate convenience, and if nothing else, cashless vending offers convenience. In vending, like many other industries, cashless payments have been shown to increase customer spending and attract new customers without the complexity or costly security associated with cash transactions. Current cashless vending settlement options include credit and debit cards, smart cards, phone-activated cellular transactions, radio transponders, and interactive online solutions. Cashless sales boosts can be attributed to the convenience of non-cash settlement that enables patrons to spend more. In addition, cashless purchases create an electronic trail of purchase detail unavailable through cash settlement. Cashless systems may also feature loyalty point rewards, prepaid gift cards, and purchase incentives.

Micro-cashless transactions as inexpensive as one dollar may require an authorization code to complete the sale. A cashless system may rely on telecommunication equipment to solicit transaction approval. In the case of cashless vending, management has the option of trying to secure an authorization for each sales transaction as it occurs (i.e., real-time) or at a predetermined point in time (i.e., batch processing). An additional benefit of cashless vending is the ability to offer higher priced products since the customer is not restricted to cash on hand. Currently, Pepsi and Dr. Pepper are testing credit card enabled soft drink machines in which transactions are processed quickly via a wireless network. One firm, USA Technologies, for example, provides wireless Internet applications that enable vending machines to accept payment via credit card, smart card, hotel room key card, and assorted RFID tags. Such variety enhances the potential of unattended points of sale to the hospitality landscape.

Future is significant

Wearable computers, not just authorization chips, form the basis for an innovative set of communication and reporting applications some vending operators are developing. Body-worn technology suggests powerful applications capable of significantly impacting both on and off-premise services, including route management, data mining, product replenishment, menu engineering, and labor productivity. In addition, the recent proliferation of vending company websites supporting a variety of online opportunities provides a solid base for expansion into sophisticated online purchasing, virtual private networks, online training, and other web-based applications, including e-wallets. In addition, unattended business centers, in-room mini-bars, and kiosk operations are beginning to appear in public spaces of hotels, restaurants, and clubs.

The hospitality industry faces a challenging labor market. A popular but seldom considered
mainstream opportunity exists in the application of unattended points of sale, better known as automatic merchandising. Advanced electronic capabilities that enable remote machine monitoring, mobile phone activated purchases, and card-based transactions are being rapidly adopted. As telemetry applications and cashless transactions alter the vending industry, hospitality management would be wise to investigate the potential benefits of vended operations.

References

7. Ibid.

Note: A logical source of information for hospitality industry practitioners interested in pursuing v-commerce opportunities is to contact the National Automatic Merchandising Association in Chicago, Illinois, or visit their website (www.vending.org).

Michael L. Kasavana is a NAMA professor in the School of Hospitality Business at Michigan State University.
## Appendix A

<table>
<thead>
<tr>
<th>Vending technology trade journal websites</th>
</tr>
</thead>
<tbody>
<tr>
<td>amoonline.com</td>
</tr>
<tr>
<td>vending.org</td>
</tr>
<tr>
<td>vendorgames.com</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Software</th>
</tr>
</thead>
<tbody>
<tr>
<td>aes-intellinet.com</td>
</tr>
<tr>
<td>ruthsx.com</td>
</tr>
<tr>
<td>aes-intellinet.com</td>
</tr>
<tr>
<td>ruthsx.com</td>
</tr>
<tr>
<td>auditsystems.com</td>
</tr>
<tr>
<td>streamware.com</td>
</tr>
<tr>
<td>compuvend.com</td>
</tr>
<tr>
<td>televend.com</td>
</tr>
<tr>
<td>emsst.com</td>
</tr>
<tr>
<td>validata.com</td>
</tr>
<tr>
<td>isochron.com</td>
</tr>
<tr>
<td>vendonline.com</td>
</tr>
<tr>
<td>marconi-online.com</td>
</tr>
<tr>
<td>vendscape.com</td>
</tr>
<tr>
<td>meiiglobal.com</td>
</tr>
<tr>
<td>vendmaster.com</td>
</tr>
<tr>
<td>msa.com</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hardware</th>
</tr>
</thead>
<tbody>
<tr>
<td>automaticproducts.com</td>
</tr>
<tr>
<td>orenemas.com</td>
</tr>
<tr>
<td>nationalvendors.com</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DEX Software Vendors</th>
</tr>
</thead>
<tbody>
<tr>
<td>AuditSystems.com</td>
</tr>
<tr>
<td>Rutherford.com</td>
</tr>
<tr>
<td>CompuVend.com</td>
</tr>
<tr>
<td>Streamware.com</td>
</tr>
<tr>
<td>Emssl.com</td>
</tr>
<tr>
<td>Validata.com</td>
</tr>
<tr>
<td>Meieasylrax.com</td>
</tr>
<tr>
<td>Vendmaster.com</td>
</tr>
</tbody>
</table>

Contents © 2003 by FIU Hospitality Review. The reproduction of any artwork, editorial or other material is expressly prohibited without written permission from the publisher, excepting that one-time educational reproduction is allowed without express permission.
Employee job satisfaction in major cruise lines

by Hsin-Hui Hu,
Jinlin Zhao,
and Cheryl Carter

A survey of 244 crew members with six major cruise lines indicated the most satisfaction with organization and supervision, satisfaction with working environment and ship life, and least satisfaction with rewards. The study suggests that the analysis of job satisfaction level may be used to develop organizational strategies to improve shipboard employee job satisfaction.

The Cruise Lines International Association (CLIA) states that cruising is currently the fastest growing segment of the travel and tourism industry, estimating that the cruise industry generates $12 billion in revenues per year. Between 1981 and 2000, vessel passenger capacity grew from 41,073 to 165,381 passengers, with an average growth of 7.8 percent per year. During the same period of time, passengers increased from 1.43 to 6.88 million, an average annual increase of 8.4 percent. Various companies have commissioned 63 additional vessels to be built over the next five years, which will dramatically increase passenger capacity.1

As the number of cruise passengers and vessels increases, so will the number of crew required to deliver the many services on board. Given the estimated large number of new builds on order over the next five years, 150,000 additional staff and crew jobs will be generated.2

Main3 and Martin and Hunt4 stated that job satisfaction or dissatisfaction has a direct effect on an employee's intention to stay in or leave the organization. Heskett, et al., in their book, *The Service Profit Chain*,5 stressed the importance of employee satisfaction in the profit chain of a service organization. Although there are many studies of employee satisfaction in other industries, only a few studies related to employee satisfaction on a single cruise line exist,6 but there is no industry-wide cruise line specific research.

Unlike employees in other
industries, shipboard employees work and live in a unique captive environment, seven days a week, working long hours within a paramilitary ship-command structure offering little privacy. There is an urgent need to explore job satisfaction levels of shipboard employees in the cruise line industry. With an increasing number of employees aboard in the coming years, such a study will be beneficial to cruise line management to better understand employee needs and expectations and formalize better human resources strategies in employee recruitment and retention.

This study assesses the level of shipboard crew members' job satisfaction in six cruise line companies. By understanding factors affecting job satisfaction, organizations could improve working conditions and develop organizational strategies to control shipboard employee turnover and to increase shipboard employee retention rates. The research explores the factors which have the greatest impact on overall shipboard job satisfaction and employee turnover and the differences among demographic groups when they respond to employee job satisfaction factors.

Employees are assets

The Brookings Institution stated that an employee is one of the most important "intangible assets" in the organization. Employee satisfaction is important to an organization's success. Weisman and Nathanson argued that job satisfaction influences behaviors and attitudes of employees, while Main reported that the level of employee job satisfaction could positively or negatively affect the overall level of service provided. Job dissatisfaction has a direct effect on an employee's intention to leave or stay in the organization. Satisfied employees will increase productivity and creativity and eventually increase revenue, which leads to a higher return on investment.

Many factors relevant

Researchers have argued about many relevant factors that may affect job satisfaction. Smith, Kendall, and Hulin identified work environment factors as pay, promotion, supervision, the work itself, and coworkers. Locke combined the various specific factors into broader classes, namely, events and agents. Events were categorized as work (task activity, amount, achievement, etc.); rewards (promotion, responsibility, money, etc.); and context (social and physical working condition, benefit, etc.). Agents were categorized as self (supervision, co-worker, company and management, etc.) versus others. Other factors affecting job satisfaction are centered around demographics. These characteristics include age, gender, education level, origin, and tenure of employment.

In the hospitality industry, researchers have studied job satisfaction of hotel employees, restaurant managers, and employees.
and hospitality management graduates. The results of those studies indicated that some of the issues, such as wages, security, opportunities for advancement, working conditions, and loyalty to employees, were greater concerns when employees, managers, and graduates rank the levels of job satisfaction. Ghiselli, et al., found food service managers had the highest satisfaction levels of satisfaction in activity, social service, security, and moral values, but the lowest level of satisfaction in compensation, recognition, company policies and practices, and social status. Huncer and George also found restaurant employees ranked security, social service, moral values, activity, plus responsibility with the highest satisfaction levels, but advancement and compensation with the lowest levels. Their study indicated there were significant differences in job satisfaction scores with the subgroups of age, job tenure, gender, and job type.

**Questionnaire is created**

In 1998, Testa, Williams, and Pietrzak created The Cruise Line Job Satisfaction Questionnaire (CLJSQ) which focuses on the unique aspects of a shipboard lifestyle in the cruise industry, including 31 items which measure overall job satisfaction. The researchers did four experiments to test and retest reliability and validity to approve the usability of the instrument, though several variables, as they suggested, might need to be “revised or removed.”

During July and November of 2001, the researchers surveyed cruise line employees at the Port of Miami and Port Everglades in Florida. A convenient sample was selected. The self-report questionnaires were distributed to 244 willing participants at the Seaman Centers and calling stations at the two ports during the time when ships of six major cruise lines operated in and out of the ports.

The questionnaire was written in English because English is the requisite working language aboard cruise vessels and employees must understand English before being hired. Oral explanations and instructions were given to the participants in English by the researchers. All respondents exhibited no language barriers. Participants were allowed to complete the survey with no time limitations. Responses were collected immediately after completion and participants were assured that complete confidentiality would be maintained.

A modified CLJSQ was used to measure job satisfaction levels of respondents. Some of the variables in the previous instrument were combined and those more closely related to the employee satisfaction factors were selected. In this survey instrument, 19 work environment factors were selected and grouped into subcategories such as organization, supervision, rewards, working conditions, and ship life. Demographic measures were age, gender, origin, marital status, job
level, and tenure of employee. The researchers conducted a pilot study among graduate students in a “Problem Solving in the Cruise Line Industry” course at Florida International University.

The instrument ranked answers on a four-point scale ranging from 1 (very dissatisfied) to 4 (very satisfied). Respondents were asked to rate their level of job satisfaction for organization policies, salary, benefits, work schedule, supervisors, quality of employee food, and living accommodation. The survey instrument also included questions for demographic information such as age, gender, marital status, job title, tenure of employment, and length of current contract.

Data were analyzed by using the SPSS 10. Descriptive statistics were used to describe the characteristics of the participants and frequencies and percentages were computed. Coefficient Alpha was used to study the reliability of job satisfaction subscales. The relationships between demographic variables and five subcategories of job satisfaction were examined by using t-tests and analysis of variance (ANOVA). These analyses were conducted at the p<0.05 level. T-tests and ANOVA would help researchers understand if there are significant differences among demographic groups such as male versus female, married versus unmarried, different groups, such as age, job level, and birth origin when the participants respond to job satisfaction variables.

The majority of respondents were males (87.7 percent), unmarried (60.7 percent) and young, aged 21-34 years old (72.5 percent). Respondents were mostly from three continents, Europe (36.5 percent), Asia (34.8 percent), and the Americas with 16 percent from Central and South America and 10 percent from North America; 69.7 percent of respondents were crew, 16.0 percent staff, and 14.3 percent officers. Nearly one-third (32.4 percent) of respondents indicated they did not know what they would do in the future, while 24.6 percent indicated they intended to stay for one to two years and 23.8 percent planned to stay for two to five years.

Job satisfaction ranked

Respondents ranked their level of satisfaction among the variables differently.

Generally, respondents were satisfied with the following:

- the organization in terms of professional development, fairness of company policies, regulations and rules, company concern for well-being, and job security
- the working environment based upon contract length, schedule, time off, and equipment
- the supervisor related to their concern for employee well-being, level of respect shown, and fairness
- and most variables associated with the ship life category
<table>
<thead>
<tr>
<th>Variable</th>
<th>Very Satisfied</th>
<th>Satisfied</th>
<th>Dissatisfied</th>
<th>Very Dissatisfied</th>
<th>Missing</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n (%)</td>
<td>n (%)</td>
<td>n (%)</td>
<td>n (%)</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Organization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Company concern for professional development</td>
<td>33 (13.5)</td>
<td>178 (73.0)</td>
<td>30 (12.3)</td>
<td>3 (1.2)</td>
<td>0</td>
<td>244</td>
</tr>
<tr>
<td>The fairness of company policies</td>
<td>19 (7.8)</td>
<td>151 (61.8)</td>
<td>54 (22.1)</td>
<td>19 (7.8)</td>
<td>1 (0.5)</td>
<td>244</td>
</tr>
<tr>
<td>Employee policies, regulations and rules</td>
<td>27 (11.1)</td>
<td>170 (69.6)</td>
<td>41 (16.8)</td>
<td>6 (2.5)</td>
<td>0</td>
<td>244</td>
</tr>
<tr>
<td>Company concern for well-being</td>
<td>27 (11.1)</td>
<td>172 (70.5)</td>
<td>43 (17.6)</td>
<td>2 (0.8)</td>
<td>0</td>
<td>244</td>
</tr>
<tr>
<td>Job security</td>
<td>33 (13.5)</td>
<td>170 (69.6)</td>
<td>32 (13.1)</td>
<td>8 (3.3)</td>
<td>0</td>
<td>244</td>
</tr>
<tr>
<td>Rewards</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opportunity for growth</td>
<td>40 (16.3)</td>
<td>150 (61.4)</td>
<td>44 (18.0)</td>
<td>9 (3.8)</td>
<td>1 (0.5)</td>
<td>244</td>
</tr>
<tr>
<td>Benefit package</td>
<td>25 (10.1)</td>
<td>112 (46.0)</td>
<td>74 (30.3)</td>
<td>32 (13.1)</td>
<td>1 (0.5)</td>
<td>244</td>
</tr>
<tr>
<td>Salary based upon responsibilities</td>
<td>27 (11.0)</td>
<td>118 (48.4)</td>
<td>74 (30.3)</td>
<td>24 (9.8)</td>
<td>1 (0.5)</td>
<td>244</td>
</tr>
<tr>
<td>Working Environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length of the contract</td>
<td>37 (15.1)</td>
<td>139 (55.7)</td>
<td>58 (23.8)</td>
<td>12 (4.9)</td>
<td>1 (0.5)</td>
<td>244</td>
</tr>
<tr>
<td>Work schedule</td>
<td>30 (12.2)</td>
<td>152 (62.3)</td>
<td>50 (20.5)</td>
<td>11 (4.5)</td>
<td>1 (0.5)</td>
<td>244</td>
</tr>
<tr>
<td>Amount of time off</td>
<td>25 (10.2)</td>
<td>136 (55.7)</td>
<td>62 (25.4)</td>
<td>21 (8.7)</td>
<td>0</td>
<td>244</td>
</tr>
<tr>
<td>The quality and maintenance of job-related equipment</td>
<td>37 (15.1)</td>
<td>170 (69.6)</td>
<td>22 (9.1)</td>
<td>13 (5.4)</td>
<td>2 (0.8)</td>
<td>244</td>
</tr>
<tr>
<td>Supervision</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisor concern for well-being</td>
<td>34 (13.9)</td>
<td>156 (63.9)</td>
<td>42 (17.2)</td>
<td>11 (4.5)</td>
<td>1 (0.5)</td>
<td>244</td>
</tr>
<tr>
<td>The level of respect shown by supervisor</td>
<td>39 (15.9)</td>
<td>143 (60.6)</td>
<td>48 (19.7)</td>
<td>8 (3.3)</td>
<td>1 (0.5)</td>
<td>244</td>
</tr>
<tr>
<td>The fairness of the supervisor</td>
<td>32 (13.1)</td>
<td>158 (63.9)</td>
<td>45 (18.4)</td>
<td>10 (4.1)</td>
<td>1 (0.5)</td>
<td>244</td>
</tr>
<tr>
<td>Ship life</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Living accommodation</td>
<td>29 (11.9)</td>
<td>155 (63.4)</td>
<td>43 (17.6)</td>
<td>16 (6.6)</td>
<td>1 (0.5)</td>
<td>244</td>
</tr>
<tr>
<td>The quality of employee food</td>
<td>24 (9.9)</td>
<td>105 (43.0)</td>
<td>78 (32.0)</td>
<td>37 (15.1)</td>
<td>0</td>
<td>244</td>
</tr>
<tr>
<td>Availability and quality of health and fitness staff and facilities</td>
<td>51 (20.9)</td>
<td>145 (59.5)</td>
<td>34 (13.9)</td>
<td>11 (4.5)</td>
<td>3 (1.2)</td>
<td>244</td>
</tr>
<tr>
<td>Availability and quality of recreation staff and facilities</td>
<td>34 (13.9)</td>
<td>141 (57.8)</td>
<td>55 (22.5)</td>
<td>13 (5.3)</td>
<td>1 (0.5)</td>
<td>244</td>
</tr>
</tbody>
</table>
Respondents, however, indicated a significant level of dissatisfaction among some of the factors which cannot be overlooked by the management of the cruise lines. Nearly half (48.1 percent) the respondents (32.0 percent dissatisfied and 15.1 percent very dissatisfied) ranked the level of quality of employee food the least satisfactory variable. For benefit packages, 43.4 percent expressed dissatisfaction (30.3 percent dissatisfied and 13.1 percent very dissatisfied). For salary based upon responsibility, 40.1 percent were not satisfied (30.3 percent dissatisfied and 9.8 percent very dissatisfied). If managers intend to sustain their companies and reduce the turnover ratio of employees, they should pay close attention to the critical issues of food, compensation, and employee benefits.

Differences are found

When the authors compared the demographic variables—gender, marital status, age groups, origin of birth, and job tenure—with the mean score of the job satisfaction subcategories—organization, supervision, rewards, working environment, and ship life—in Table 2, they found significantly different responses.

- **Gender:** There was a moderately significant difference between genders with regard to their level of satisfaction with the organization (t (242) = 1.656, p<.10). Male crew members (x̄= 2.92) reported being more satisfied with the organization than female crew members (x̄=2.77). Traditionally, shipboard crew members were comprised of only male workers. Surprisingly, 12.3 percent of all respondents were female. Generally, female crew members reported being more satisfied than male crew members in rewards, working environment, and ship life. Therefore, future research with a larger sampling of female shipboard employees is advisable.

- **Marital Status:** Satisfaction with organization varied significantly with marital status (t (244)=2.449, p<.05). Married employees (x̄=2.99) reported being more satisfied with organization than unmarried employees (x̄=2.84). The results of the survey could not give the authors a full explanation as to why married employees are in general happier than unmarried employees with the organization. Further research is needed.

- **Age:** Overall, the group under 44 years of age reported a lower level of satisfaction than the over 45-year-old group, though not significant. The result might imply that younger employees have unrealistic expectations of their jobs. If the younger employees' expectations are not fulfilled, they may leave their jobs. However, if employees adapt themselves well, they may be more likely to return, which could be the reason the over 45-year-old employees reported a higher level of satisfaction.
Table 2
Demographic variables and job satisfaction

<table>
<thead>
<tr>
<th>Variable</th>
<th>Organization Mean</th>
<th>Organization T-value</th>
<th>Supervision Mean</th>
<th>Supervision T-value</th>
<th>Rewards Mean</th>
<th>Rewards T-value</th>
<th>Working environment Mean</th>
<th>Working environment T-value</th>
<th>Ship life Mean</th>
<th>Ship life T-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>214</td>
<td>2.92</td>
<td>2.89</td>
<td>2.69</td>
<td>2.83</td>
<td>2.77</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>30</td>
<td>2.77</td>
<td>4.35*</td>
<td>2.88</td>
<td>0.83</td>
<td>2.77</td>
<td>0.79</td>
<td>2.89</td>
<td>0.84</td>
<td>2.87</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>96</td>
<td>2.99</td>
<td>2.92</td>
<td>2.71</td>
<td>2.78</td>
<td>2.76</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Married</td>
<td>148</td>
<td>2.84</td>
<td>2.45*</td>
<td>2.87</td>
<td>0.64</td>
<td>2.70</td>
<td>0.13</td>
<td>2.87</td>
<td>-1.20</td>
<td>2.8</td>
</tr>
<tr>
<td>Age (years)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 21</td>
<td>6</td>
<td>2.91</td>
<td>2.92</td>
<td>2.67</td>
<td>2.94</td>
<td>2.78</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21-34</td>
<td>177</td>
<td>2.87</td>
<td>2.87</td>
<td>2.71</td>
<td>2.81</td>
<td>2.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35-44</td>
<td>48</td>
<td>2.59</td>
<td>2.93</td>
<td>2.61</td>
<td>2.82</td>
<td>2.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45-54</td>
<td>9</td>
<td>3.00</td>
<td>2.93</td>
<td>2.93</td>
<td>3.11</td>
<td>2.89</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>55 or over</td>
<td>2</td>
<td>3.13</td>
<td>3.08</td>
<td>3.50</td>
<td>3.17</td>
<td>3.85</td>
<td>3.38</td>
<td>1.35</td>
<td>3.13</td>
<td>0.51</td>
</tr>
<tr>
<td>Job level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Officer</td>
<td>35</td>
<td>2.81</td>
<td>2.9</td>
<td>2.69</td>
<td>2.99</td>
<td>2.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff</td>
<td>39</td>
<td>2.78</td>
<td>2.99</td>
<td>2.63</td>
<td>2.97</td>
<td>2.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crew</td>
<td>170</td>
<td>2.94</td>
<td>2.44*</td>
<td>2.87</td>
<td>0.61</td>
<td>2.72</td>
<td>0.37</td>
<td>2.77</td>
<td>3.90*</td>
<td>2.87</td>
</tr>
<tr>
<td>Origin of Birth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asia</td>
<td>85</td>
<td>2.96</td>
<td>2.85</td>
<td>2.76</td>
<td>2.73</td>
<td>2.87</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Europe</td>
<td>89</td>
<td>2.87</td>
<td>2.87</td>
<td>2.75</td>
<td>2.93</td>
<td>2.75</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Africa</td>
<td>6</td>
<td>2.83</td>
<td>3.06</td>
<td>2.61</td>
<td>3.00</td>
<td>2.79</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North America</td>
<td>24</td>
<td>2.71</td>
<td>3.11</td>
<td>2.81</td>
<td>3.02</td>
<td>2.83</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central &amp; South America</td>
<td>40</td>
<td>2.95</td>
<td>1.50</td>
<td>2.95</td>
<td>1.32</td>
<td>2.54</td>
<td>1.16</td>
<td>2.71</td>
<td>3.15**</td>
<td>2.66</td>
</tr>
<tr>
<td>Tenure of employment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>53</td>
<td>2.86</td>
<td>2.87</td>
<td>2.72</td>
<td>2.85</td>
<td>2.84</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One to less than two years</td>
<td>45</td>
<td>2.80</td>
<td>2.86</td>
<td>2.68</td>
<td>2.92</td>
<td>2.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two years to less than five years</td>
<td>72</td>
<td>2.89</td>
<td>2.76</td>
<td>2.7</td>
<td>2.79</td>
<td>2.61</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Five years to less than ten years</td>
<td>52</td>
<td>2.92</td>
<td>2.88</td>
<td>2.62</td>
<td>2.78</td>
<td>2.95</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ten years or more</td>
<td>22</td>
<td>3.17</td>
<td>2.45*</td>
<td>2.94</td>
<td>0.93</td>
<td>2.91</td>
<td>0.89</td>
<td>2.92</td>
<td>0.73</td>
<td>2.78</td>
</tr>
</tbody>
</table>

*P<0.1; ** P<0.05; ***P<0.01
Job Level: There was a moderately significant difference between both job level and organization (F (2, 241)= 2.44, p<.10), and job level and working environment (F (2, 241)=3.895, p<.05). Crew members (x= 2.94) were more satisfied with the organization than officers (x=2.81) or staff (x=2.78). Crew members had the lowest satisfaction mean score (x=2.77) in the working environment, and reported having longer length of contract, longer working hours, and less time off than officers and staff. In order to provide a more satisfactory working environment, it seems that management may want to give careful consideration to the length of crew contracts and work schedules so as to better motivate them.

Origin of Birth: Respondents were asked to write their origin of birth on the survey. The research found there were some differences in the level of job satisfaction based upon the origin of birth of respondents. For organization, crew members from Asia and Central and South America were more satisfied, while those from North America were least satisfied. For supervision, crew members from North America were more satisfied, while those from Asia (x=2.73) and Central and South America (x=2.71). This may occur because Asian and Central and South American crew members were employed in non-managerial positions with longer contracts, longer work schedules, and less time off. Crew members might not be satisfied with employee food on board nor the compensation they receive for their effort. Management needs to fully examine all these issues.

Tenure of Employment: Tenure with present employer was found to be a significant factor associated with job satisfaction in the cruise lines. Crew members employed for less than one year were slightly more satisfied than those employed from one to less than two years. The most dissatisfied group were those working from two to five years. This could indicate that after the novelty of the job has worn off,
crew members may become dissatisfied. If management is intent on cultivating long-term employees, they should carefully identify factors that create dissatisfaction among crew members and take corrective measures to develop employment strategies which encourage tenure and enhance the quality of internal service. Based upon the responses, the level of job satisfaction and the length of tenure increased after five years of employment. Maturity and work experience may lead crew members to adjust their expectations to a more realistic level of satisfaction. The result of the research supported a previous study by Duke and Sneed that employees with the most tenure may have grown accustomed to the work place, adjusted their expectations toward the organization or gained better financial status through longevity of employment.

Results provide guidance

By understanding shipboard employee satisfaction factors, management could improve job design, working conditions, and appropriate compensation to provide better internal quality service for the employees. In turn, employees will provide better service for customers, and subsequently enhance performance and profitability of the organization.

Results of the study found that, overall, crew members were satisfied with their jobs in the cruise lines. They were more satisfied with organization and supervision and satisfied with working environment.

<table>
<thead>
<tr>
<th>Length of time</th>
<th>Mean Satisfaction Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 year or less</td>
<td>2.65</td>
</tr>
<tr>
<td>1-2 years</td>
<td>2.7</td>
</tr>
<tr>
<td>2-5 years</td>
<td>2.75</td>
</tr>
<tr>
<td>5-10 years</td>
<td>2.85</td>
</tr>
<tr>
<td>more than 10 years</td>
<td>2.96</td>
</tr>
</tbody>
</table>

Table 3
Tenure with current employer and mean satisfaction scores

FIU Hospitality Review / Spring 2003

Contents © 2003 by FIU Hospitality Review. The reproduction of any artwork, editorial or other material is expressly prohibited without written permission from the publisher, excepting that one-time educational reproduction is allowed without express permission.
and ship life. Results indicate they were least satisfied with rewards, in particular, pay and benefit packages. The results echoed the findings of Ghiselli, et al., adult Hancer and George's. Management needs to be creative and innovative in its approach to improvements in benefit package offerings. It might be advisable to establish incentive programs in the benefit packages. Compensation should be based upon employees' responsibilities, and payment for overtime might be considered.

Crew members were most dissatisfied with the quality of employee food. Although it is seemingly a small issue, food is the most fundamental of human needs. If management does not address shipboard employees' dissatisfaction with food, it may create an adverse reaction which could jeopardize all efforts of management to make employees happy. Management should quickly address the issue and suggest the need for providing culturally diverse menus using fresh and healthy ingredients. When possible, crew members should be invited to participate in the design of the employee menu and their suggestions for change in the menu should be seriously considered.

The research also found that gender, marital status, origin of birth, job level, and tenure were related to job satisfaction. The sample of female crew members was quite small. Interestingly, the study reported that in most categories surveyed, female crew members were more satisfied with their jobs than males. Future research may wish to focus more specifically on female crew member job satisfaction by using a larger, more representative sample. Based upon overall levels of job satisfaction reported, cruise organizations may change their recruitment policies and give thoughtful consideration to the recruitment of female workers and married employees.

The study indicates that 90 percent of shipboard laborers are from foreign countries. Respondents from various origins of birth reported different levels of job satisfaction. Cruise line management should be sensitive to the cultural traditions and diversity. They should respect employee cultural differences and encourage tolerance aboard ship by creating various culture-related programs such as cultural fairs and celebrations of different cultural holidays.

Shipboard management leads mostly a young and multi-cultural workforce. However, based on the study, this group seems to lack vision for their career development in the cruise line industry; 80 percent of the respondents do not have a plan to stay beyond five years. This creates a challenge for management to establish career development training programs to compel young employees to realize long-term benefits and opportunities of a career path in the cruise line industry. Through these training programs, management might reduce the turnover ratio and training cost of new employees and
sustain more skillful employees to provide consistent quality services to its customers and seize competitive advantage.

**Services should improve**

Global labor recruitment could be restricted by governments, causing a labor shortage; on the other hand, there is an increasing demand for labor in the cruise line industry, but there are many drawbacks to working and living in the very limited space on board. If cruise lines are to sustain themselves against competition, improve morale, and retain skilled employees, it is important to provide superior internal quality services, increase compensation, and enhance employee career development by creating internal promotion opportunities. Specifically, to increase job satisfaction levels and build strong relationships between management and employees, management should put a human resource department on board to do the following:

- resolve the day-to-day human resource problems
- be specifically trained to deal with culturally-related issues
- be a good communicator and listener to employees' grievances and suggestions
- be empowered to proactively identify problems and resolve them quickly
- develop measures to monitor employee satisfaction

Data were collected with a convenient sample over a limited period of time between July and November 2001. Respondents may not be representative of all crew members working on board in the major cruise lines. Follow-up research should be conducted with a random sample selection to accurately represent the cruise line industry. More satisfaction factors can be added to the survey to more effectively analyze levels of satisfaction. Using the four-point scale created difficulties in analyzing levels of job satisfaction. Future study should use a five-point scale to better measure satisfaction levels.

This study lays a foundation for future research regarding job satisfaction as it relates to promised service level and effective growth in the cruise industry. Employee job satisfaction and perceived importance of job facets may change over time. Thus, research should be conducted periodically and management should alter its employment strategies to meet the needs of employees and cruise lines. It will be valuable to research how job satisfaction levels impact the employees' performance and the evolutionary service expectations of cruise line customers and management.

**References**


'International Transport Workers'


Ghiselli, et al.


Ghiselli, et al.

Hansen and George.
Survivorship in international chain restaurants in Korea

by Woo Gon Kim
and Kaye Chon

Several western chains have done well in Korea, while others have withdrawn from the market. The authors summarize the current operational results of western chain restaurants in Korea, report positive impacts of western food service firms, and analyze the key elements leading to their survival and non-survival. Some lessons could be used as tools to establish entrance strategies of western chain restaurants in Korea as well as in other Asian markets.

The food service industry in Korea has grown considerably in size and changed significantly in composition over the last several decades. Within a decade the number of restaurants increased more than three times, compared to the figure of 164,000 units in 1988. Many of them are family-owned and are small commercial restaurants.

Food away from home (FAFH) expenditures per household in 1990 represented 21.6 percent of total food spending expenditures, while that figure in Japan was approximately 25 percent in the same period. In the U.S., FAFH expenditures per household in 1996 were approximately 45 percent compared to 35 percent in Korea.¹

Western chains enter

It was not until the 1980s that Korean food service became a modern enterprise with strong management emphasis. In 1982 Burger King signed a franchise contract and started operations in Korea. In the following two to seven years, American chain restaurants such as Wendy's and Kentucky Fried Chicken (KFC), both in 1984, Pizza Hut in 1985, McDonald's in 1986, Denny's in 1987, Coco's in 1988, and Domino's Pizza in 1990 penetrated the Korean food service market.

In the 1990s, the Korean food service firms that made joint ventures or franchising agreements with western food service
firms shifted from their previous concentration on fast-food operations toward more diverse concepts such as family restaurants and dinner houses. Some of those restaurants are TGI Friday's that arrived in 1991, Ponderosa in 1992, Sizzler in 1993, Popeye's in 1994, Tony Roma's, Bennigan's, and Planet Hollywood in 1995, Chili's and Hard Rock Cafe in 1996, Outback Steakhouse in 1997, and Starbucks in 1999. By providing casual and friendly service and a nice atmosphere not usually found in Korea, western restaurants became the food service equivalent of Levi's Jeans or Coca-Cola.2

Chains are varied
There were also some successful chains that are non-western restaurants. Lotteria, a Japanese hamburger restaurant chain, was the first chain restaurant company introduced to Korea in 1979; its performance is ranked at the top of the fast-food segment in terms of the number of units and sales. Skylark, a successful family restaurant in Japan introduced in 1993, emphasized a lower-end market positioning strategy by maintaining a lower average check of US$10. The average check of most western family restaurants in Korea ranged from US$13 to US$18. Marché, introduced in 1997 from Switzerland, became a strong competitor against the rapidly expanding American food service chains.

Table 1 summarizes the status of American food service chains operating in Korea at the end of 2000. Of the top 25 restaurant chains ranked by Nation's Restaurant News in terms of U.S. sales, only 10 were represented in Korea.3 Baskin-Robbins had the largest number of units in Korea, but most were very small. In terms of the number of units, McDonald's with 244 units was the second largest U.S. chain in Korea, followed by KFC and Pizza Hut, with 206 and 199 units, respectively. Within the segment of family and dinner house, Coco's with 29 units was the leading restaurant, followed by TGI Friday's and Bennigan's with 17 units and 10 units, respectively. In terms of sales volume, McDonald's was the number one chain with US$206.4 million, followed by Pizza Hut and Kentucky Fried Chicken with US$156.3 and US$145.3 million, respectively. Among family and dinner house restaurants, TGI Friday's was the leading chain with US$46.9 million, followed by Bennigan's and Coco's with US$31.5 million and US$23.4 million, respectively.

It is interesting to note that Coco's, which commands a relatively tiny market share in the U.S. restaurant industry and which falls behind TGI Friday's and Outback Steakhouse in terms of the number of units operating in the U.S. was ranked as one of the top 10

---

Kim and Chon

---

Contents © 2003 by FIU Hospitality Review. The reproduction of any artwork, editorial or other material is expressly prohibited without written permission from the publisher, excepting that one-time educational reproduction is allowed without express permission.
chains in Korea. In fact, Coco’s, the first U.S. family restaurant to open in Korea in 1988, enjoyed the leadership position before other well-known, high-profile U.S. chain restaurants penetrated the Korean food service industry. Sizzler, Ponderosa, and Chili’s operated only a few units in Korea in 2000.

Table 1
U.S.-based food service chain restaurants in Korea in 2000

<table>
<thead>
<tr>
<th>Brand</th>
<th>Rank in number of units Korea</th>
<th>Number of units in Korea</th>
<th>Korean sales volume (US $Millions)</th>
<th>U.S. units rank</th>
<th>U.S. units number</th>
<th>U.S. sales rank</th>
<th>U.S. sales volume (US$Mill)</th>
</tr>
</thead>
<tbody>
<tr>
<td>McDonald’s</td>
<td>2</td>
<td>244</td>
<td>$206.4</td>
<td>2</td>
<td>12,629</td>
<td>1</td>
<td>$19,006</td>
</tr>
<tr>
<td>Burger King</td>
<td>8</td>
<td>93</td>
<td>67.3</td>
<td>4</td>
<td>8,139</td>
<td>2</td>
<td>8,059</td>
</tr>
<tr>
<td>Hardee’s</td>
<td>10</td>
<td>23</td>
<td>15.6</td>
<td>16</td>
<td>2,673</td>
<td>13</td>
<td>2,139</td>
</tr>
<tr>
<td>KFC</td>
<td>3</td>
<td>206</td>
<td>145.3</td>
<td>8</td>
<td>5,182</td>
<td>6</td>
<td>4,300</td>
</tr>
<tr>
<td>Popeyes</td>
<td>6</td>
<td>160</td>
<td>108.6</td>
<td>32</td>
<td>1,165</td>
<td>35</td>
<td>986.4</td>
</tr>
<tr>
<td>Pizza Hut</td>
<td>5</td>
<td>199</td>
<td>156.3</td>
<td>5</td>
<td>8,084</td>
<td>5</td>
<td>5,000</td>
</tr>
<tr>
<td>Domino’s Pizza</td>
<td>7</td>
<td>149</td>
<td>39.1</td>
<td>11</td>
<td>4,679</td>
<td>9</td>
<td>2,560</td>
</tr>
<tr>
<td>Little Caesars Pizza</td>
<td>14</td>
<td>6</td>
<td>NA</td>
<td>12</td>
<td>3,890</td>
<td>26</td>
<td>1,200</td>
</tr>
<tr>
<td>Coco’s</td>
<td>9</td>
<td>29</td>
<td>23.4</td>
<td>88</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Ponderosa</td>
<td>17</td>
<td>3</td>
<td>NA</td>
<td>56</td>
<td>465</td>
<td>58</td>
<td>560.2</td>
</tr>
<tr>
<td>Sizzler</td>
<td>15</td>
<td>4</td>
<td>8.3</td>
<td>76</td>
<td>253</td>
<td>90</td>
<td>315</td>
</tr>
<tr>
<td>Tony Roma’s</td>
<td>15</td>
<td>4</td>
<td>9.0</td>
<td>85</td>
<td>157</td>
<td>100</td>
<td>297</td>
</tr>
<tr>
<td>Bennigan’s</td>
<td>12</td>
<td>10</td>
<td>31.5</td>
<td>79</td>
<td>237</td>
<td>71</td>
<td>460.3</td>
</tr>
<tr>
<td>Chili’s</td>
<td>18</td>
<td>2</td>
<td>NA</td>
<td>43</td>
<td>626</td>
<td>21</td>
<td>1,555</td>
</tr>
<tr>
<td>Pizza Uno Chicago</td>
<td>18</td>
<td>2</td>
<td>NA</td>
<td>86</td>
<td>155</td>
<td>94</td>
<td>308.4</td>
</tr>
<tr>
<td>Outback Steakhouse</td>
<td>13</td>
<td>8</td>
<td>11.7</td>
<td>47</td>
<td>574</td>
<td>18</td>
<td>1,729</td>
</tr>
<tr>
<td>TGI Friday’s</td>
<td>11</td>
<td>17</td>
<td>46.9</td>
<td>58</td>
<td>452</td>
<td>24</td>
<td>1,334</td>
</tr>
<tr>
<td>Dunkin Donuts</td>
<td>4</td>
<td>200</td>
<td>19.5</td>
<td>13</td>
<td>3,650</td>
<td>15</td>
<td>2,007</td>
</tr>
<tr>
<td>Baskin-Robbins</td>
<td>1</td>
<td>460</td>
<td>29.7</td>
<td>18</td>
<td>2,438</td>
<td>57</td>
<td>573.3</td>
</tr>
</tbody>
</table>

Source of units and sales in Korea: Korean Restaurant Association, 2000
Source of U.S. units and sales data: Nation’s Restaurant News, (June 26, 2000). The NRN data reported are for the top-100 food service chains only. Data for firms outside the top 100 are shown as "NA."
Managers of the three different segments of Korean restaurants, traditional Korean food, fast food, and family and dinner house, were selected for an interview. The 12 restaurants included one traditional Korean food restaurant, two hamburger fast food restaurants, two pizza restaurants, two chicken restaurants, and five family and dinner house restaurants. The majority were western chain restaurants.

Positive impact recognized

Managers participating in the focus group interview recognized the following positive impacts of western food service firms on the Korean food service industry:

- **Enriching dining out**: The entrance of western restaurants enabled local diners to gain new exposure to diverse choices in dining-out experiences, while encouraging local restaurant managers to benchmark from western restaurants. Many Korean restaurant managers recognized that they were not able to compete with their traditional management style. They thought that food taste and quality were the keys for success, but they underestimated other important factors such as atmosphere, interior design, service, cleanliness, etc. They eventually recognized that restaurants existed to cater not only to hungry people, but for social activity purposes as well.

- **Stimulating growth**: The average square footage of restaurants tended to increase. Many mom-and-pop establishments found they could not compete effectively against a huge local restaurant, international chain, or domestic chain restaurant. Regardless of the rapid increase in the number of stand-alone restaurants, the proportion of restaurants whose owners directly participated in management decreased from 22.3 percent in 1982 to 12.9 percent in 1991. This fact reflects that many small eating places had become large local restaurants affiliated with prominent local restaurant chains.

Some larger corporations entered the food service industry as a diversification strategy by becoming master franchisers of mostly western restaurant companies. The conglomerate's motivation to participate in the food service industry with multiple brands was the positive cash flow created by restaurant operations and real estate investments. Wealthy individuals, conglomerates, and institutions tend to invest in land to benefit from the appreciation of real estate, while they have to pay large amounts of tax for unused land. By building restaurants on the vacant land, landowners were able to take advantage of both the constant cash flow and significantly reduce their tax burdens.

The three typical firms participating in the food service industry were food-related companies, retail companies, and hotels. Food produc-
tion, manufacturing, and supplier firms already had some business relationships with the food service industry; therefore, it was relatively easy to establish new firms. Hotels had the expertise in operating upscale food and beverage outlets; it was therefore a natural strategy for them to expand by establishing free-standing restaurants outside the hotels.

- **Effective management:** When western food service firms entered the Korean market, they were initially perceived as a threat to traditional Korean restaurant operators. Korean food service enterprises learned western ways of efficiently operating restaurants. Franchising played an important role in seeking replications of advanced management techniques and strategies. Management innovation became an important ingredient for successful restaurant operations even though Korean food service managers traditionally did not place much emphasis on it.

  Included among the most successful local chain restaurants was Nolbu Korean traditional restaurant. Its history started with a small Korean restaurant selling boiled pork in 1987, and within two years it launched its first franchise operation. Currently Nolbu operates and franchises more than six different concept restaurants featuring traditional Korean cuisine. Menus consist of purely traditional Korean fare that is rooted in traditional home-style recipes.

  Nolbu Korean restaurant's success is attributed to the application of western scientific management techniques into Korean traditional food operations. Its expansion in terms of the number of franchised units and sales has skyrocketed. Since Nolbu is not competing against many western chain restaurants, its market position among Korean restaurants is superior.

- **Manuals and technology:** Traditional Korean food service operators were astonished by the introduction of manuals that clearly explained the overall operational processes. Stimulated by international chain restaurants' sophisticated operating manuals, traditional Korean restaurants started developing their own. In addition, many Korean conglomerates entered the food service industry with franchise contracts with famous western restaurants because they considered food service as a profitable business. In order to survive the competition of famous western restaurants, many local restaurants developed their own brands and expanded with local franchising. Technological advances of western restaurants have led to sophisticated business controls and established franchise systems. In addition, well-organized manuals of employee training, food production, menu design and layout, and store opening were important lessons for local operators.
New market niche: Since western food service chains introduced the take-out concept, the take-out business became more popular and a variety of foods were developed for take-out. Traditionally, Chinese restaurants used to be the provider of most popular take-out or delivery food in Korea, but fast-food restaurants serving pizza, chicken, and hamburgers expanded rapidly by offering take-out or delivery services. In addition, diverse local cuisines such as Kimbap, a kind of California roll, and a variety of noodle dishes were developed and served more often by take-out.

Reduced labor costs: Traditionally small eating places were considered as one of the least popular places to work. The restaurant industry was often perceived as a gateway for unskilled workers; as a result, the employee turnover rate in the food service industry was known to be one of the highest. However, this trend was reversed when western food service operators started offering effective training programs, with trainees exposed to various functions related to the management of operations, sanitation, service, human resources, basic equipment maintenance and operations, restaurant cashing out, and record-keeping. The adoption of these ongoing employee training programs aided in reducing the high turnover rate. A dramatic increase in the percentage of part-time employees reduced labor costs and improved the bottom line figure.

Survivor cases presented
Despite the difficulty of identifying primary reasons of success, some key factors of survival of western and local chain restaurants could be identified by restaurant managers.

Localization of services: TGIF translated more than 100 operating and training manuals into Korean to take full advantage of the expertise of the parent company. TGIF succeeded in localizing its service standards by adjusting to local customs and culture. For example, TGIF created a new ordering method, "kneel-down" service, rather than the traditional western stand-up ordering method. TGIF developed many local menu items to appeal to Korean guests. Kimchi rice pilaf, the Bulgogi set menu, and Bibimpap (a dish with rice and several vegetables) are the most popular items developed by TGIF in Korea and sold throughout TGIF outlets in other countries. The success of Marché, introduced from Switzerland, could be partly attributed to the effort of catering to local taste preferences. Marché has been very flexible in developing and changing its original recipe in order to improve guest satisfaction.

A success case as a local brand was Spaghettia, an Italian-style restaurant. Its primary reason for success was the trade secret of its recipes that changed...
original Italian flavors with some major adaptations, including developing its thin sauce and serving larger portions of sauces to cater to local preferences. In addition, Spaghettia consistently used the best quality ingredients regardless of the relatively high food cost ratio.

BBQ Chicken, Inc. originated from a fast food concept that specializes in providing quick, convenient, varied chicken entrees such as fried, hot wing, barbecued, smoked, Cajun-style, nuggets, gold fingers, burgers, and side dishes. The BBQ name does not represent the traditional western-style barbeque restaurant theme, but more of a combination of several western style operations such as KFC, Popeye’s, and others. BBQ achieved enormous growth since 1994 and became the leading Korean chain restaurant in the number of units offering fast food chicken items. Its success was mainly attributed to the development of its appealing spicy hot sauce which met the taste preferences of local guests, thereby attracting repeat customers.

- Cost controls: With the completion of a central kitchen in 1992, TGIF reduced food costs from 40 to 30 percent. Marketing activities such as sending birthday cards, using coupons, and issuing mileage and point cards were very successful. Nolbu Korean restaurant is a typical example of success by adopting an American management technique, which led to a dramatic food cost reduction. Nolbu was able to reduce food costs from 30 percent to 20 percent by developing a database of recipes of Korean cuisines. Previously, local restaurateurs adopted best practices from the excellent western operational systems.

- Product and service quality:
Mister Pizza, a typical success story of a local chain with sales of US$13 million in 2000, has built a good reputation based on its tasty pizza. By implementing an extensive research and development program to better serve the local taste, Mister Pizza succeeded in developing hand-toasted dough, which was less greasy and tasted fresher. The chain also introduced a new potato pizza menu that became a popular item, and was later imitated by Pizza Hut and other competitors.

All foods of Marche are selected and produced in front of guests so most employees have cooking skills as well as the ability to function as wait staff. The primary goal of Marche is to serve fresh food and to have a consistent supply of fresh food items. The atmosphere is very casual with old market style; a variety of people like the open atmosphere. Marche offers a wide variety of items including fresh salad and baked goods, as well as Japanese, Chinese, Korean, and other ethnic foods. Marche is well known for keeping the menu lifecycle as short as possible and taking advantage of a wide variety of menus as compared to other western family chains.
• Finding good locations: Starbucks' success was attributed to its strategies in locations, capitalizing on locations with high traffic flow and easy access from mass transportation such as subway and bus, which appealed to younger customers. A similar strategy worked well for other chains.

The BBQ chain was known to be good at finding the right locations and utilizing a unique positioning strategy. BBQ opened many small units in residential areas and others were located close to educational institutes, while Kentucky Fried Chicken (KFC) opened spacious units in relatively established locations with a high volume of traffic. BBQ expanded very rapidly in terms of number of units, but the average size of the unit was very small compared to its major competitor, Kentucky Fried Chicken. In 2000 BBQ operated 1,320 units while Kentucky Fried Chicken had 206 units.

• Effective investment strategy: The success of Spaghettia was partly attributed to its relatively efficient investment strategy. In order to minimize costs, most units chose basement locations with savings of almost half the rental costs, while most other family chains were located on the first or second floor. Spaghettia offset its location disadvantages with massive marketing and promotion efforts.

Non-survivor cases presented
Managers identified some key factors for the failure of western restaurant chains.

• High pricing strategy: Denny's concept adjustment efforts with a high pricing strategy conflicted with its original American concept. Many local guests had dined at U.S. outlets and their perception of reasonable prices did not match the high pricing strategy in Korea. Denny's price positioning in Korea was close to the range of other U.S. family and dinner house chains. Many clients preferred to go to other restaurants after their first visit to Denny's in Korea because its price-value relationship was much lower than what they expected.

• Poor management: Wait staff's service and cooking skills in the production area were not up to par partly due to lack of a consistent employee training program by Denny's. Employee morale was quite low due to ineffective compensation and a promotion policy that was based on seniority. The capabilities of management staff were not sufficient enough to compete against other major U.S. chain restaurants in Korea.

• Poor marketing strategy: Denny's marketing effort was not creative and often imitated other competitors. The special events Denny's prepared were not popular due to lack of creativity. Failure of its promotional effort was partially due to the lack of harmony between employees in the marketing department and each outlet's guest contact employees.

• Poor location: When Planet Hollywood was first introduced in Korea, it had the mass media spotlight even before
opening with large crowds gathering for the ceremony. An inappropriate location without a subway line and with heavy traffic congestion was key in the failure of Planet Hollywood. This was a good example for U.S.-based chains to learn from since it withdrew from business within seven months. Many guests visiting Planet Hollywood complained about insufficient parking spaces which inconvenienced guests and prevented many from becoming repeat customers.

- **Lack of thorough feasibility study**: Excessive capital expenditures without a thorough feasibility study implied the foreseeable failure of Planet Hollywood in Korea. Its initial investment was approximately US$7 to 8 million. In order to attain break-even sales, daily revenue should have been at least US$50,000 or the equivalent to 10 turnovers. Extremely heavy initial opening costs and normal operating costs caused the high break-even point.

- **Failure of cost control**: Planet Hollywood management failed to control labor costs at the outset. The restaurant opened with approximately 300 full-time employees, and labor productivity declined as customer counts decreased. It failed because of inadequate cost controls and lower-than-expected sales.

- **Failure to adjust to local taste**: Cooks in the production area failed to adjust to local tastes because most food recipes were benchmarked from the Planet Hollywood in Hong Kong. Korean customers have very different food tastes from those of Hong Kong even though they are located in the same Pacific Rim area. Most foods were too salty and contained too much oil for local taste preferences, but management did not catch the problem in a timely manner.

**Competition exists**

The Korean food service industry showed dramatic growth over the last several decades. Up to 1996 all segments of the food service industry grew because of the significant increase of food-away-from-home expenditures, increased incomes, and people’s increased interest in food. In the 1980s western fast food chains were forerunners in launching brands in Korea, and in the 1990s many western family steakhouse and dinner house restaurant chains entered the market. Western restaurant chains provided clean facilities, quality services, great atmospheres, and systematic management that was astonishing to local customers who had never experienced them before. Beginning in 1998 the Korean economy went through an economic recession and the food service industry faced stiff competition. Some segments still show strong growth, but some exhibit a decline.

Even though the overall food service market is more competitive than ever before, there is still enough room for new chains to introduce concepts. Since most
western restaurants were fast food or dinner house chains, new concept restaurants such as theme restaurants are expected to have great appeal if introduced. Many other top American chains such as Applebee’s, Olive Garden, Red Lobster, and International House of Pancake (IHOP) have not yet been introduced. The reason may be that some of those chains still have ample growth opportunities in the United States, giving them little motivation to expand into Korea. In addition, since they are very successful chains, their royalty fee structure may be too high for local partners. However, American chain restaurants may still have more expansion opportunities in Asia. Coco’s and Tony Roma’s found new life in Asia when the brand’s popularity began to decline in the United States.

A number of premier U.S. chains keep dominating market share, while others are not market leaders; some chains have withdrawn from the market entirely. The key elements of survivors were localization of services and operations, effective management leading to cost control, product and service quality, good locations, and an effective investment strategy. The key elements of non-survivors were inappropriate concept modification with a high pricing strategy, poor management and lack of consistent employee training, poor marketing strategy, poor location, lack of thorough feasibility study, failure of cost control, and failure to adjust local taste.

Understanding the key non-survival elements could help western food service firms reduce their chances of business failure during their expansion movement in Korea as well as in other Asian markets. Even in the same Pacific Rim regions, for example, some chains succeeded in Hong Kong and Singapore, but could not succeed in Japan and Korea. It is important for western restaurant chains to do a more in-depth analysis of each country, even within the same geographic regions. A more comprehensive understanding of unique cultures, food habits, and local tastes of each country will be helpful for western chains to successfully expand into Asia. Another important factor for Korea and other Asian markets is the extent to which newcomers can or should modify original concepts and recipes to meet local needs and tastes.

Reviewing more accurate and comprehensive success and failure cases could be invaluable resources for those restaurant firms planning to expand into foreign countries.
References


'Devine Kimble, "Barriers and Opportunities in Singapore," Cornell Hotel and Restaurant Administration Quarterly 37, no. 3 (June 1996): 50-54.

"The Top 100," Nation's Restaurant News (June 26, 2000).


'Ibid.

Kimble.

Woo Gon Kim is an assistant professor in the School of Hotel and Restaurant Administration at Oklahoma State University, Stillwater, and Kaye Chon is chair, professor, and head of the School of Hotel and Tourism Management at the Hong Kong Polytechnic University, Hung Hom, Kowloon Hong Kong.
Website performance: Hong Kong hotels

by Rob Law
and Tony Chung

This research examines the performance of Hong Kong hotel websites in terms of information quality, and compares the performance among different hotel categories. Different from existing theoretical studies analyzing hotel websites, this research incorporates the perceptions of hotel guests and practitioners in the evaluation development process. Empirical results reveal that significant differences exist in the performance scores of luxury, mid-priced, and economy hotels. The authors also discuss implications for hotel industry practitioners and policymakers.

At present, the hotel industry makes heavy use of the World Wide Web for electronic commerce. In general, hoteliers hold a positive view toward bookings on the web because they perceive it as serving as a low-cost distribution channel, which has a significant effect on both businesses and consumers. The distinctiveness of the web lies in the fact that it offers high-speed global data transferring, high levels of interaction, and the possibility of direct links to database and reservation systems, all without any limitations in locations, time zones, or computer platforms. These unprecedented advantages benefit a hotel's business. When potential consumers browse the web, the company has a chance to extend its marketing reach to the global marketplace, supplementing traditional distribution channels.

Van Hoof, et al., conducted a study with hotel managers in Queensland, Australia, about their use and perceptions of the Internet. The research indicated that the managers perceived the Internet to be very important to the future of the accommodation industry. However, Internet use in the form of e-mail and the web is still limited. Morrison, et al., presented a similar argument, stating that many small hotels are definitely not realizing all advantages of the Internet. In a study of the websites of 30 small travel agencies in the Netherlands, van der Pijl stated: "Although almost all site owners
acknowledge the importance of the Internet, the actual behavior does not always illustrate a real sense of urgency. Such a statement appears to be applicable to hotel websites in Hong Kong, a major sector of the tourism industry in a leading Asian travel destination.

Websites provide convenience

In recent years, many hotels have created websites to promote services and products, with the ultimate goal of making it easier for customers to make online reservations. Despite the growing popularity of online promotions, the existing hospitality literature does not contain much in-depth information about the information quality and performance of hotel websites. Simply counting whether a particular feature is available on the website does not provide much knowledge about the quality of information contained, and, therefore, the site’s performance.

Likewise, using traditional metrics such as number of hits and number of unique visitors does not offer enough reference standards for both guests and hoteliers to determine the relative standing of a specific hotel website. Some published articles have discussed tourism marketing on the Internet and the contents of travel websites. However, the number of studies examining the quality of contents and features of hotel websites has been very limited. In an earlier study, Chung and Law proposed an incremental website performance measurement technique which used the hotel website functionality factors ranked by hotel managers in equal intervals.

The technique starts by calculating an average score ($M_a$) for each attribute of the included dimensions. This average score is then transformed to a weighted score ($W_a$), for a total of $n$ factors by:

$$W_a = \frac{1 + n - M_a}{\sum_{i=1}^{\infty}} \quad (1)$$

Depending on its content, each factor was mapped by a value in the range of 1 to 5, representing the rating scale of the factor. Aggregating the average weighted values and their corresponding rating values generated an overall performance score for a specific hotel website. However, in their study, Chung and Law failed to offer detailed examination of individual hotel websites. In view of the emerging need of studying information quality on hospitality websites, this research applies the incremental website performance technique to investigate and evaluate the applications of the Internet to the information quality of hotel websites and to examine the performance of the websites in terms of content richness for hotels in Hong Kong. This approach should have direct applicability to hotel websites in other regions.

Study is evaluative

This study identifies the predominant features of hotel websites, and evaluates the contents of the websites of Hong Kong.
Kong hotels on the basis of the selected features, which have been validated by a group of senior hotel executives. It then comparatively evaluates and compares the site contents of different categories of hotels. There are several important implications for hotels that are currently adopting or are considering adopting the Internet as a medium for marketing, communications, and reservations. It portrays current standards within different hotel categories, allows hotels to compare the performance of their websites with those of the industry at large, and may serve as a reference in the future development of a company-wide e-business standard.

Internet transforms sales

Sanders estimated that global sales conducted over the Internet would reach US$6.8 trillion in 2004, and that North America would remain the leader of online sales, attaining a value of US$3.2 trillion. The same study predicted that the regions with the second and third largest volume of sales will be Asia-Pacific (US$1.6 trillion) and Western Europe (US$1.5 trillion). The rapid growth of Internet-based business transactions can be expected to continue, judging from a global survey of more than 500 business leaders in which most believed that the Internet would transform the market in the near future.

In Asia, the number of active Internet users has been growing considerably. E-marketers expect that the region's Internet users will increase from 64 million in 2001 to 173 million by the end of 2004. Although business-to-consumer (B2C) e-commerce growth is still at an early stage of development, business-to-business (B2B) e-commerce is quickly expanding in many Asian countries. The total amount of revenues from B2B e-commerce is anticipated to grow from US$36.2 billion in 2000 to more than US$300 billion in 2004.

The Internet provides a platform for the largest and fastest revolution ever seen in tourism marketing and distribution. The technology can help trace and meet the needs of rapidly changing consumer patterns. Gerry McGovern, president of NUA Internet Surveys, has said that the Internet is an important marketing channel and that this channel will make a company stronger. The major challenge, however, is how to attract visitors to a site. Providing high-quality and timely information appears to be a major factor in ensuring such an attraction. As a result, companies have to act and react quickly. McGovern expected that one-third of all bookings in the business travel sector would be channelled through the Web by the end of 2003. According to José Luis Zoreda, former chief executive officer of the World Tourism Organization Business Council, Internet technology offers Spanish tourism a unique opportunity to regain control over sales of its own holiday products, but the sector needs to get onto the
web as quickly as possible. Zoreda commented that, given the size of tourism interests, Spain could not afford to miss this opportunity, and that the country had to position itself strongly in the new information channels that are progressively revolutionizing distribution methods.

**Online travel grows**

Using the web to make travel arrangements is one of the largest commercial applications in the Internet. It has been forecast that online U.S. leisure travel and reservation sales will rise from US$12.2 billion in 2000 to US$32.7 billion in 2005, representing 22 percent of the industry's total sales. The World Tourism Organization also predicted that the value of online leisure travel bookings will grow as much as tenfold to some US$29.4 billion by the end of 2003.

There are numerous successful cases of online travel sales and transactions. One example is Priceline.com. The president of Priceline.com, Tim Brier, explained how his company used the Internet to boost sales of airline tickets and hotel rooms to US$400 million and US$100 million, respectively, in a year. After a customer has made a bid for an airline ticket, for example, Priceline.com lets the airlines decide if they will accept the client's offer, based on whether there are seats available at the price the client wants to pay. If so, the sale is made; vacant seats are filled, and people who want to travel can do so at their own prices.

Similar to the rapid growth of Priceline.com, travel agent bookings through Global Distribution Systems (GDS) increased significantly at a rate of 8.3 percent in 2000, illustrating continuously strong growth in what is already the dominant electronic distribution channel for hotels. Currently, 95 percent of GDS related hotel bookings are made by travel agents. The remaining 5 percent of electronic hotel bookings through GDS engines are consumer Internet bookings made through websites of major online retail travel agencies, such as Travelocity and Expedia. TravelCLICK's data indicate that more than 17 percent of consumer hotel bookings on the Internet were made via GDS in 2000, up considerably from 11 percent in 1999. Internet hotel bookings on GDS in the previous year were more than triple compared to the 1999 level.

Existing hospitality literature has a very limited number of published articles investigating the performance of websites, thus, hoteliers generally have no benchmark to follow for developing professional and useful websites to attract online purchasers. This study makes an attempt to bridge such a gap by setting up an evaluation approach that measures the overall performance of a hotel website.

**Hotel sites evaluated**

Applying the incremental website performance measurement technique, the study quantitatively evaluates the performance of hotel websites in terms of the richness of
the information they contain. This was achieved by developing an information quality evaluation approach that measures a hotel website's performance, and was developed based on a conceptual framework of five hotel website components, including facilities information, customer contact information, reservations information, surrounding area information, and management of website.

Thirty-nine website attributes were further set up on the basis of these five components. The components and attributes were modified from published articles in the hospitality and tourism literature that examine websites and then validated by a panel of senior hotel executives in Hong Kong. The research process was then divided into three stages, rating the importance of hotel website attributes, measuring the website attributes, and producing a performance score.

The research commenced by surveying the perceptions of 46 hotel customers with online experience, many of whom were also hotel practitioners, on the importance attributes. Respondents were asked to rate the importance of the 39 attributes in five components; a mean score was calculated for each attribute. In order to reflect a weighted value of importance for further analysis, the mean score was then transformed to an average weighted score.

A rating scale was then developed using the 39 attributes in five components. The scale was modified to a detailed checklist with a five-point judgmental rating level for each attribute. A score of website attributes was then produced using the developed checklist. To more accurately represent managers' perceptions, the average weighted score of importance and the score of website attributes were combined to form an overall score of performance which indicated the performance of the website in the context of the selected attributes and dimensions. The score of performance was then multiplied by a factor to transform the score from a five-point scale to a commonly used 100-point scale.

The final stage of the research was to evaluate the performance of the websites of all 80 member hotels of the Hong Kong Hotels Association in 2001. This last stage also compared and contrasted website performance among different categories of hotels.

Hypotheses tested

Six hypotheses were developed to explore and examine the contents of hotel websites. This section discusses the establishment of these hypotheses.

Internet users can go online at any time and access any information that they wish. Similarly, hospitality service/product suppliers can display service/product information on their websites for global customers to view and purchase. This study is, therefore, to test the performance among different hotel categories in providing information about their facilities on the website. Hypothesis 1 (H01) was thus developed as follows:

Law and Chung
• **Ho1**: There are no significant differences among different hotel categories in providing online information on hotel facilities.

Hospitality and tourism researchers have agreed that the Internet allows suppliers to set up a direct link of communications with their customers. The website thus enables hotels to overcome communications barriers and establish a dialogue directly with online guests. The channel provides a useful tool for suppliers to implement micro marketing and customer relationship marketing. Additionally, electronic inquiry forms are available on the web for customers; hotels can therefore reply to inquiries directly via e-mail. In this way, a good customer relationship is developed and the relationship contributes to the building of customer loyalty. The study tests the performance of different categories of hotels in customer communications information on websites. Hypothesis 2 (Ho2) was then developed, as follows:

• **Ho2**: There are no significant differences among different hotel categories in providing online customer contact information.

The Marriott was one of the first hotel chains to start utilizing the Internet not merely for promotion but also for making reservations to its 1,000 hotels around the world by accessing the TravelWeb website in 1996. Similarly, many airlines have introduced online reservations systems to allow the purchase of tickets directly from the Internet. It has been commented that well-designed online reservations services with useful information provided to customers before purchasing can help increase the sales volume and improve the hotels’ reputations. This study will therefore also test the performance of different hotel categories in providing reservations information on the sites. Hence, Hypothesis 3 (Ho3) was developed, as follows:

• **Ho3**: There are no significant differences among different hotel categories in providing online reservations information.

In a study conducted by Chu, it was found that Internet users expect to get travel/destination-related information from airline/travel websites. The same study also revealed that customers want to have a one-stop service provided by an airline/travel website. Specifically, the customers wanted to have better itinerary planning, and wanted information about such things as transportation and major attractions in a city. For this reason, another objective of this study is to test the performance among different hotel categories in providing information about a hotel’s surrounding area on the website. Hypothesis 4 (Ho4) was then developed, as follows:

• **Ho4**: There are no significant differences among different
hotel categories in providing online information about a hotel's surrounding area.

Gilbert and Powell-Perry stated that a website is potentially a strategic information center for the hotel industry, and hotels generally have provided detailed descriptions and images of most of their facilities. To maintain the overall quality of a hotel website, management of the website is a crucial aspect for hotels to remain competitive. Hypothesis 5 (Ho5) was then developed to test the performance among different hotel categories in managing their websites.

- **Ho5**: There are no significant differences among different hotel categories in the management of their websites.

The Internet is an ideal medium for tourism marketing as it allows travel suppliers to set up a direct link of communications with customers and eliminates unequal barriers for customers and suppliers. As a result, companies with different backgrounds can compete with each other equally. Therefore, it is important to test the overall performance among different hotel categories in their hotel websites. Hypothesis 6 (Ho6) was thus developed as:

- **Ho6**: There are no significant differences among different hotel categories in website performance.

**Scores vary greatly**

Primary and secondary data were collected and a total of 80 Hong Kong hotel websites were then assessed with a Pentium III personal computer. Overall performance scores among hotel classes are shown in Tables 1 to 3. Websites in each hotel category have a wide range of performance scores. In general, websites of luxury hotels received higher scores than mid-priced hotels, which in turn outperformed their economy counterparts. The overall website performance for luxury (High Tariff A in Hong Kong's local classification), mid-priced (High Tariff B in local classification), and economy (Medium Tariff in local classification) hotels were 64.22, 51.45, and 34.99, respectively.

Having collected the necessary data for evaluation, a comparison of the attributes' performance among the three hotel categories was conducted and the mean score was used to measure the performance of the websites. One Way ANOVA and Post Hoc (Tukey) tests were used to compare the performance scores of the hotel websites. Empirical results showed significant differences in all dimensions of website attributes and in total score among different hotel categories. The websites of luxury hotels generally scored significantly higher than those of hotels in other categories (see Table 4). The results were consistent with prior studies, which stated that luxury and upscale hotels adopted
Table 1
Results of website performance for luxury hotels

<table>
<thead>
<tr>
<th>Hotel Code</th>
<th>Facilities Information</th>
<th>Customer Contact Information</th>
<th>Reservations Information</th>
<th>Surrounding Area Information</th>
<th>Management of Website</th>
<th>Overall Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>66.98</td>
<td>68.16</td>
<td>88.99</td>
<td>99.42</td>
<td>100</td>
<td>81.28</td>
</tr>
<tr>
<td>4</td>
<td>90.14</td>
<td>75.98</td>
<td>94.40</td>
<td>63.13</td>
<td>57.52</td>
<td>79.94</td>
</tr>
<tr>
<td>9</td>
<td>66.98</td>
<td>45.10</td>
<td>88.99</td>
<td>99.42</td>
<td>100</td>
<td>76.80</td>
</tr>
<tr>
<td>15</td>
<td>53.81</td>
<td>57.49</td>
<td>89.23</td>
<td>90.14</td>
<td>65.71</td>
<td>68.81</td>
</tr>
<tr>
<td>11</td>
<td>50.65</td>
<td>57.49</td>
<td>85.98</td>
<td>99.42</td>
<td>65.71</td>
<td>68.40</td>
</tr>
<tr>
<td>12</td>
<td>49.98</td>
<td>57.49</td>
<td>89.23</td>
<td>90.14</td>
<td>65.71</td>
<td>67.64</td>
</tr>
<tr>
<td>16</td>
<td>72.54</td>
<td>50.35</td>
<td>84.23</td>
<td>62.78</td>
<td>50.64</td>
<td>66.12</td>
</tr>
<tr>
<td>7</td>
<td>77.44</td>
<td>43.42</td>
<td>79.85</td>
<td>68.41</td>
<td>50.64</td>
<td>66.09</td>
</tr>
<tr>
<td>10</td>
<td>71.61</td>
<td>59.81</td>
<td>76.38</td>
<td>47.10</td>
<td>57.52</td>
<td>64.91</td>
</tr>
<tr>
<td>2</td>
<td>68.17</td>
<td>61.23</td>
<td>84.77</td>
<td>28.26</td>
<td>57.52</td>
<td>63.40</td>
</tr>
<tr>
<td>1</td>
<td>65.73</td>
<td>71.74</td>
<td>60.13</td>
<td>51.36</td>
<td>57.52</td>
<td>62.52</td>
</tr>
<tr>
<td>13</td>
<td>53.56</td>
<td>68.16</td>
<td>76.38</td>
<td>41.22</td>
<td>50.64</td>
<td>59.19</td>
</tr>
<tr>
<td>14</td>
<td>73.31</td>
<td>43.42</td>
<td>71.57</td>
<td>39.68</td>
<td>50.64</td>
<td>59.18</td>
</tr>
<tr>
<td>17</td>
<td>59.58</td>
<td>45.10</td>
<td>76.38</td>
<td>51.10</td>
<td>53.54</td>
<td>58.31</td>
</tr>
<tr>
<td>5</td>
<td>50.66</td>
<td>76.94</td>
<td>78.31</td>
<td>54.26</td>
<td>21.07</td>
<td>57.72</td>
</tr>
<tr>
<td>18</td>
<td>64.04</td>
<td>38.16</td>
<td>72.24</td>
<td>45.65</td>
<td>50.64</td>
<td>56.27</td>
</tr>
<tr>
<td>6</td>
<td>49.88</td>
<td>62.91</td>
<td>75.59</td>
<td>28.26</td>
<td>43.75</td>
<td>54.08</td>
</tr>
<tr>
<td>3</td>
<td>51.43</td>
<td>38.16</td>
<td>44.62</td>
<td>36.87</td>
<td>50.64</td>
<td>45.31</td>
</tr>
</tbody>
</table>

Average Score 63.14 56.78 78.74 60.92 58.30 64.22
Table 2
Results of website performance for mid-priced hotels

<table>
<thead>
<tr>
<th>Hotel Code</th>
<th>Facilities Information</th>
<th>Customer Contact Information</th>
<th>Reservations Information</th>
<th>Surrounding Area Information</th>
<th>Management of Website</th>
<th>Overall Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>64.38</td>
<td>53.10</td>
<td>83.74</td>
<td>73.42</td>
<td>61.38</td>
<td>67.11</td>
</tr>
<tr>
<td>4</td>
<td>88.41</td>
<td>47.16</td>
<td>75.17</td>
<td>42.32</td>
<td>39.67</td>
<td>64.00</td>
</tr>
<tr>
<td>6</td>
<td>67.48</td>
<td>60.13</td>
<td>70.66</td>
<td>38.06</td>
<td>50.64</td>
<td>60.23</td>
</tr>
<tr>
<td>20</td>
<td>64.32</td>
<td>39.13</td>
<td>78.39</td>
<td>46.75</td>
<td>50.64</td>
<td>58.02</td>
</tr>
<tr>
<td>22</td>
<td>55.25</td>
<td>51.42</td>
<td>78.39</td>
<td>40.20</td>
<td>50.64</td>
<td>56.75</td>
</tr>
<tr>
<td>3</td>
<td>62.74</td>
<td>61.23</td>
<td>65.84</td>
<td>28.26</td>
<td>50.64</td>
<td>56.64</td>
</tr>
<tr>
<td>21</td>
<td>57.38</td>
<td>43.42</td>
<td>71.83</td>
<td>41.30</td>
<td>50.64</td>
<td>54.59</td>
</tr>
<tr>
<td>17</td>
<td>47.04</td>
<td>66.49</td>
<td>71.80</td>
<td>28.26</td>
<td>52.57</td>
<td>54.43</td>
</tr>
<tr>
<td>12</td>
<td>48.33</td>
<td>45.10</td>
<td>72.58</td>
<td>31.10</td>
<td>50.64</td>
<td>53.62</td>
</tr>
<tr>
<td>9</td>
<td>46.90</td>
<td>43.20</td>
<td>78.67</td>
<td>28.26</td>
<td>66.33</td>
<td>53.41</td>
</tr>
<tr>
<td>18</td>
<td>49.13</td>
<td>45.10</td>
<td>76.38</td>
<td>45.65</td>
<td>43.75</td>
<td>52.91</td>
</tr>
<tr>
<td>13</td>
<td>45.77</td>
<td>45.10</td>
<td>72.58</td>
<td>51.10</td>
<td>50.64</td>
<td>52.84</td>
</tr>
<tr>
<td>16</td>
<td>62.51</td>
<td>66.49</td>
<td>36.93</td>
<td>37.30</td>
<td>50.64</td>
<td>52.61</td>
</tr>
<tr>
<td>28</td>
<td>64.88</td>
<td>43.42</td>
<td>38.00</td>
<td>45.57</td>
<td>66.33</td>
<td>52.66</td>
</tr>
<tr>
<td>26</td>
<td>51.38</td>
<td>59.45</td>
<td>69.81</td>
<td>9.42</td>
<td>59.45</td>
<td>52.46</td>
</tr>
<tr>
<td>11</td>
<td>44.19</td>
<td>45.10</td>
<td>72.58</td>
<td>51.10</td>
<td>50.64</td>
<td>52.26</td>
</tr>
<tr>
<td>23</td>
<td>48.57</td>
<td>51.42</td>
<td>73.13</td>
<td>31.16</td>
<td>50.64</td>
<td>52.29</td>
</tr>
<tr>
<td>25</td>
<td>44.77</td>
<td>43.42</td>
<td>68.32</td>
<td>45.65</td>
<td>59.45</td>
<td>51.89</td>
</tr>
<tr>
<td>5</td>
<td>63.72</td>
<td>53.13</td>
<td>75.05</td>
<td>9.16</td>
<td>27.96</td>
<td>51.55</td>
</tr>
<tr>
<td>1</td>
<td>59.53</td>
<td>66.27</td>
<td>28.19</td>
<td>59.80</td>
<td>40.86</td>
<td>51.34</td>
</tr>
<tr>
<td>7</td>
<td>52.65</td>
<td>54.88</td>
<td>60.91</td>
<td>14.70</td>
<td>50.64</td>
<td>49.44</td>
</tr>
<tr>
<td>14</td>
<td>45.24</td>
<td>61.23</td>
<td>51.20</td>
<td>18.46</td>
<td>59.45</td>
<td>48.16</td>
</tr>
<tr>
<td>27</td>
<td>47.25</td>
<td>59.45</td>
<td>36.68</td>
<td>26.72</td>
<td>59.45</td>
<td>46.42</td>
</tr>
<tr>
<td>8</td>
<td>42.08</td>
<td>54.20</td>
<td>69.88</td>
<td>0.00</td>
<td>52.57</td>
<td>46.31</td>
</tr>
<tr>
<td>24</td>
<td>55.26</td>
<td>51.42</td>
<td>40.02</td>
<td>17.94</td>
<td>50.64</td>
<td>45.52</td>
</tr>
<tr>
<td>10</td>
<td>37.64</td>
<td>46.17</td>
<td>68.55</td>
<td>18.46</td>
<td>50.64</td>
<td>45.30</td>
</tr>
<tr>
<td>2</td>
<td>47.59</td>
<td>31.10</td>
<td>61.28</td>
<td>19.22</td>
<td>49.67</td>
<td>43.81</td>
</tr>
<tr>
<td>29</td>
<td>40.10</td>
<td>61.23</td>
<td>33.68</td>
<td>9.42</td>
<td>59.45</td>
<td>41.61</td>
</tr>
<tr>
<td>19</td>
<td>33.77</td>
<td>38.16</td>
<td>13.96</td>
<td>4.90</td>
<td>43.75</td>
<td>27.80</td>
</tr>
<tr>
<td>Average Score</td>
<td>52.57</td>
<td>51.77</td>
<td>61.92</td>
<td>31.58</td>
<td>51.70</td>
<td>51.45</td>
</tr>
</tbody>
</table>

Law and Chung
Table 3
Results of website performance for economy hotels

<table>
<thead>
<tr>
<th>Hotel Code</th>
<th>Familiarity</th>
<th>Customer Contact</th>
<th>Reservations</th>
<th>Surrounding Area</th>
<th>Management of Website</th>
<th>Overall Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>34.83</td>
<td>47.84</td>
<td>79.53</td>
<td>18.46</td>
<td>49.67</td>
<td>46.97</td>
</tr>
<tr>
<td>8</td>
<td>37.78</td>
<td>51.45</td>
<td>75.59</td>
<td>9.42</td>
<td>50.64</td>
<td>46.66</td>
</tr>
<tr>
<td>11</td>
<td>39.02</td>
<td>54.88</td>
<td>64.16</td>
<td>13.59</td>
<td>50.64</td>
<td>45.82</td>
</tr>
<tr>
<td>6</td>
<td>43.01</td>
<td>47.81</td>
<td>56.37</td>
<td>18.46</td>
<td>57.52</td>
<td>45.69</td>
</tr>
<tr>
<td>4</td>
<td>42.19</td>
<td>54.20</td>
<td>63.93</td>
<td>18.12</td>
<td>33.97</td>
<td>44.70</td>
</tr>
<tr>
<td>30</td>
<td>36.94</td>
<td>38.16</td>
<td>67.48</td>
<td>13.77</td>
<td>59.45</td>
<td>44.00</td>
</tr>
<tr>
<td>31</td>
<td>36.64</td>
<td>38.16</td>
<td>67.48</td>
<td>13.77</td>
<td>59.45</td>
<td>43.91</td>
</tr>
<tr>
<td>15</td>
<td>41.31</td>
<td>38.16</td>
<td>76.38</td>
<td>4.90</td>
<td>43.75</td>
<td>43.68</td>
</tr>
<tr>
<td>14</td>
<td>33.35</td>
<td>61.23</td>
<td>60.31</td>
<td>4.90</td>
<td>50.64</td>
<td>43.32</td>
</tr>
<tr>
<td>5</td>
<td>32.84</td>
<td>46.17</td>
<td>70.12</td>
<td>9.42</td>
<td>47.74</td>
<td>42.51</td>
</tr>
<tr>
<td>29</td>
<td>32.76</td>
<td>47.84</td>
<td>69.88</td>
<td>0.00</td>
<td>43.75</td>
<td>40.89</td>
</tr>
<tr>
<td>2</td>
<td>46.36</td>
<td>38.04</td>
<td>35.54</td>
<td>19.22</td>
<td>57.52</td>
<td>40.45</td>
</tr>
<tr>
<td>32</td>
<td>25.81</td>
<td>38.16</td>
<td>73.13</td>
<td>9.42</td>
<td>50.64</td>
<td>39.89</td>
</tr>
<tr>
<td>7</td>
<td>34.59</td>
<td>38.16</td>
<td>45.01</td>
<td>64.49</td>
<td>23.00</td>
<td>39.80</td>
</tr>
<tr>
<td>9</td>
<td>23.37</td>
<td>43.42</td>
<td>69.09</td>
<td>4.90</td>
<td>50.64</td>
<td>38.69</td>
</tr>
<tr>
<td>18</td>
<td>23.26</td>
<td>46.20</td>
<td>27.40</td>
<td>41.30</td>
<td>52.57</td>
<td>35.45</td>
</tr>
<tr>
<td>33</td>
<td>34.00</td>
<td>38.16</td>
<td>20.62</td>
<td>26.81</td>
<td>59.45</td>
<td>34.81</td>
</tr>
<tr>
<td>16</td>
<td>48.06</td>
<td>46.17</td>
<td>6.50</td>
<td>28.26</td>
<td>33.97</td>
<td>33.99</td>
</tr>
<tr>
<td>12</td>
<td>25.66</td>
<td>38.16</td>
<td>38.07</td>
<td>14.70</td>
<td>52.57</td>
<td>33.33</td>
</tr>
<tr>
<td>22</td>
<td>30.74</td>
<td>38.16</td>
<td>22.19</td>
<td>19.22</td>
<td>59.45</td>
<td>33.12</td>
</tr>
<tr>
<td>24</td>
<td>28.20</td>
<td>58.45</td>
<td>23.87</td>
<td>0.00</td>
<td>52.57</td>
<td>33.02</td>
</tr>
<tr>
<td>3</td>
<td>27.47</td>
<td>38.16</td>
<td>65.23</td>
<td>18.46</td>
<td>4.41</td>
<td>32.96</td>
</tr>
<tr>
<td>19</td>
<td>18.66</td>
<td>38.16</td>
<td>38.13</td>
<td>18.46</td>
<td>52.57</td>
<td>31.71</td>
</tr>
<tr>
<td>21</td>
<td>29.34</td>
<td>47.84</td>
<td>22.19</td>
<td>19.22</td>
<td>29.88</td>
<td>30.12</td>
</tr>
<tr>
<td>27</td>
<td>27.85</td>
<td>38.16</td>
<td>10.29</td>
<td>19.22</td>
<td>59.45</td>
<td>29.69</td>
</tr>
<tr>
<td>23</td>
<td>25.78</td>
<td>43.42</td>
<td>28.03</td>
<td>0.00</td>
<td>43.75</td>
<td>29.92</td>
</tr>
<tr>
<td>25</td>
<td>35.41</td>
<td>38.16</td>
<td>36.53</td>
<td>4.90</td>
<td>11.29</td>
<td>29.43</td>
</tr>
<tr>
<td>10</td>
<td>32.34</td>
<td>24.75</td>
<td>34.88</td>
<td>9.42</td>
<td>29.88</td>
<td>27.95</td>
</tr>
<tr>
<td>17</td>
<td>23.19</td>
<td>38.16</td>
<td>14.37</td>
<td>0.00</td>
<td>52.57</td>
<td>25.51</td>
</tr>
<tr>
<td>13</td>
<td>17.32</td>
<td>23.13</td>
<td>28.73</td>
<td>4.90</td>
<td>51.59</td>
<td>24.39</td>
</tr>
<tr>
<td>26</td>
<td>12.86</td>
<td>38.16</td>
<td>13.60</td>
<td>9.42</td>
<td>43.75</td>
<td>22.13</td>
</tr>
<tr>
<td>28</td>
<td>23.46</td>
<td>30.13</td>
<td>9.81</td>
<td>9.42</td>
<td>14.19</td>
<td>18.54</td>
</tr>
<tr>
<td>20</td>
<td>18.77</td>
<td>8.03</td>
<td>6.50</td>
<td>4.90</td>
<td>33.97</td>
<td>14.47</td>
</tr>
</tbody>
</table>

Average Score | 30.75 | 40.04 | 42.40 | 14.31 | 44.26 | 34.99
Table 4
Summary of hypothesis testing results

<table>
<thead>
<tr>
<th>Research Hypotheses</th>
<th>Significant Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ho1: There are no significant differences among different hotel categories in providing online information about hotel facilities.</td>
<td>Luxury hotels &gt; Mid-priced hotels, Economy hotels; Mid-priced hotels &gt; Economy hotels</td>
</tr>
<tr>
<td>Ho2: There are no significant differences among different hotel categories in providing online customer contact information.</td>
<td>Luxury hotels, Mid-priced hotels &gt; Economy hotels</td>
</tr>
<tr>
<td>Ho3: There are no significant differences among different hotel categories in providing online reservations information.</td>
<td>Luxury hotels &gt; Mid-priced hotels, Economy hotels; Mid-priced hotels &gt; Economy hotels</td>
</tr>
<tr>
<td>Ho4: There are no significant differences among different hotel categories in providing online information about a hotel’s surrounding area.</td>
<td>Luxury hotels &gt; Mid-priced hotels, Economy hotels; Mid-priced hotels &gt; Economy hotels</td>
</tr>
<tr>
<td>Ho5: There are no significant differences among different hotel categories in the management of their websites.</td>
<td>Luxury hotels &gt; Economy hotels</td>
</tr>
<tr>
<td>Ho6: There are no significant differences among different hotel categories in website performance.</td>
<td>Luxury hotels &gt; Mid-priced hotels, Economy hotels; Mid-priced hotels &gt; Economy hotels</td>
</tr>
</tbody>
</table>

more information technology than economy and budget hotels. Furthermore, Morrison, et al., commented that many small hotels did not effectively use their websites and did not realize the advantages of the Internet.

**Performance is measured**

Most previous studies focused on the availability of common features on hotel websites and did not provide detailed insights into measuring the performance of a website. The current study makes an initial attempt to use a more sophisticated approach to measure the performance of websites by including the views of hotel practitioners and returning a total performance score. This study has provided empirical evidence that the approach that has been developed can be used as a good framework for measuring the performance of hotel websites. Empirical results of this research show that the most comprehensive hotel websites are in the luxury category; luxury hotels used Internet functions and Internet

*Law and Chung*
marketing values more effectively. This study will offer important insights for hospitality marketers and practitioners. Apparently hotels require a framework that can bridge the gap between simply connecting to the web and harnessing its power for competitive advantages. Jeong and Lambert commented that improving customers' perceptions of the effectiveness of hotel websites and maintaining their positive attitude toward hotel websites are the key factors that keep them using the sites. Internet users want to get timely, accurate, relevant, and important information such as location maps, room rates, room availability, and online responses to their decisions to purchase. These attributes should be incorporated into a hotel's Internet marketing efforts to gain competitive advantages in a customer-focused cyber business market.

As revealed in Tables 1 to 3, hotels in general and the economy properties in particular need to rework their websites on the dimensions which received low performance scores. Additionally, hoteliers have to determine the groups of potential customers that are valuable for their website efforts in order to have a large impact on business, and hence to maximize commercial benefits. Working closely with web designers, hotel managers should actively examine the feasibility of applying some existing business practices such as using mapping to build web presentations as suggested by Emercik, et al., or following the dimensions and attributes of quality criteria for website excellence. Research on hotel websites in the context of hospitality and tourism is in an early stage. Therefore, more work should be done to further improve the approach used in this study. Future research can repeat this study with another group of respondents, and make comparisons by hotel size, hotel chains, or group affiliations. Future studies can also be extended to other travel and tourism websites, and the impact of hotel websites on the purchase decisions of customers is another area for future research. Lastly, the actual ways of how hotels can build sites that will improve their performance rating and the associated business return certainly deserve future research efforts.

The hotel industry has been facing continuous competitions and challenges which always have a large impact on existing sales and marketing strategies. To remain competitive, hotels need to apply new marketing skills to meet new changes and requirements. The Internet can certainly serve as an effective marketing channel to provide a good opportunity to develop new strategies for success.

References


H. Van Hoof, H. Buys, and T. Combrink, "The Use of the Internet in the Queensland
Law and Chung

45
"Chu.
"Law.
"Morrison, Taylor, Morrison, and Morrison.
"An earlier draft of this paper was presented in the First Asia Pacific Forum for Graduate Students Research in Tourism, Macau, May 22, 2002, and appeared in the Conference Proceedings, pp. 87-98.

Rob Law is associate professor of information technology in the School of Hotel and Tourism Management, Hong Kong Polytechnic University, and Tony Chung is a manager of the Hong Kong Newton Hotel.
Effect of agency problems on RTC hotel appraisals

by Michael C. Dalbor

Agency problems that helped cause the banking crisis in the United States in the 1980s impacted hotel appraisals completed for the Resolution Trust Corporation (RTC). Lower appraised values would help make more bids acceptable, helping to sell more assets quickly. The results indicate appraised hotel values were much lower than sales prices in states with a high number of bank failures.

Agency problems such as moral hazard and regulatory forbearance contributed to the banking crises in the United States in the late 1980s and early 1990s. Moral hazard can generally be defined as agents taking actions to the detriment of their employers. In terms of the banking industry, this occurred as bank officials took actions that were not in the best interest of depositors. Regulatory forbearance was the practice of government regulators foregoing disciplinary actions against troubled banks in the hope that the banks would turn themselves around. The problems with the banking industry were so severe that the Federal Savings and Loan Insurance Corporation (FSIC) went bankrupt and the Federal Deposit Insurance Corporation (FDIC) experienced losses in the late 1980s.

Some of the major causes of the crises were practices used by many lenders at the time. In order for borrowers to qualify for a loan, an appraisal had to be completed. This led to a number of problems in the loan process. For one, commercial properties are often more specialized and complex than single-family residences, requiring more specialized skills and training. However, at the time, appraisers were designated by a wide variety of organizations that were not organized under the auspices of state governments. Therefore, the educational background and experience of these appraisers varied significantly.

Another major factor in the process was the ability of borrowers to hire appraisers directly. This
meant that the appraiser was working directly for the borrowers, who were primarily interested in seeing values that would justify the loans for their projects. While an appraiser’s compensation was not based upon any particular value, appraisers were not compensated based upon accuracy either. Appraisers were (and still are) compensated at a flat rate. However, appraisers who presented values that were consistently too low for borrowers to qualify for loans were putting any future potential business in jeopardy.

RTC solves problems

This situation got out of hand by the late 1980s. An extreme example was the case of a parcel of vacant commercial land that was appraised a total of six times. The appraised values began at $2 million and eventually rose to $175 million on the same parcel. FSLIC later sold the property at auction for $2.5 million. Congress finally began to deal with the problem of cleaning up the banking mess though the Financial Institutions Reform, Recovery and Enforcement Act (FIRREA) of 1989. President Bush signed the bill that included a wide variety of reforms regarding the appraisal industry. A major provision of the act was the formation of the Resolution Trust Corporation (RTC), which was given the daunting task of selling a significant number of problem real and financial assets of failed banks in a timely manner.

The RTC was formed to help solve a problem with which many politicians in Congress did not particularly want to deal. First, Congress passed legislation in 1980 that served to deregulate the savings and loans industry in order to help keep it competitive. Furthermore, this legislation increased deposit insurance to $100,000 per account, which created a large moral hazard problem by allowing savings and loans to use greater amounts of brokered deposits.

By the time the RTC was formed, the problem was enormous, particularly in the southwestern United States. The FDIC tracked bank failures in the U.S. between 1980 and 1994. During this time, 599 banks, or more than 29 percent of total supply, failed in Texas alone. Failures in other states were also high: 44 percent of banks in Alaska failed along with 33 percent of banks in Oklahoma. The total for the U.S. and Puerto Rico was 1,614, or 9.1 percent of total supply, dwarfing the banking problems of the Great Depression.

For years before the formation of the RTC, the costs of the cleanup were consistently underestimated. The problem was a large and growing one that needed to be taken care of in a timely manner in order to ensure the solvency of the banking system and have the smallest impact on the economy.

The nature of the problem was rather embarrassing for politicians, who were seen as part of the problem to begin with. Additionally, many in Congress did not want to raise taxes during a period of worsening economic conditions.
fore, the RTC was only intended to be a temporary government agency that would sell non-performing assets and loans to various bidders. Moreover, the government intended to monitor the operations of the RTC via the Government Accounting Office (GAO) which would make reports to Congress.

**Asset sale is goal**

Given the political sensitivity of the savings and loan cleanup and the limited funding of the RTC, one of the major goals of the RTC was the cumulative sale of assets. These sales and the ratio of sales price to appraised value were reported to Congress by the GAO. Although the RTC was also evaluated on the ratio of sales proceeds to book value, the sales goal was significant. For example, the RTC’s sales goal in 1992 alone was approximately $100 billion. This goal had an important effect on the operations of RTC officials.

Examples of the problems created by the book value reduction goal were revealed in a GAO report on RTC auctions held in the Washington/Baltimore area in 1992. The GAO concluded that the auctions were not planned or managed correctly in order to maximize revenues. Complete information was not always supplied to bidders and many times property information was inaccurate. It appears that the RTC was overwhelmed and unprepared for the task given to them. As the GAO concluded, “inadequacies occurred...because the staff was motivated to get sales done quickly in order to meet the book value reduction goals.”

One of the major tools used by RTC officials in the auction process was a recent appraisal of the property. Since the RTC was generally not experienced in real estate management or valuation, it relied significantly upon experienced appraisers to help assist in selecting a winning bid on an asset. While recovery rates on book value were tracked and evaluated, removing properties from the books was a major priority. Therefore, if a hotel was appraised at a relatively high value, it would be possible that no bids could be accepted because they were too far below the appraised value. On the other hand, low appraised values would mean that the bids would be closer to the appraisals, perhaps even exceeding them. This would make more bids acceptable, helping to sell the assets faster. Moreover, it might make the RTC appear to be more “efficient” by accepting bids above appraised values.

**Policies are established**

At the end of 1992, the RTC issued a directive stating all of its auctions must be conducted in accordance with established policies and guidelines. By establishing policies and procedures and by gaining experience over time, the situation at the RTC began to improve. By 1993, the end was in sight for the RTC because there were fewer properties to sell. In May 1993 Congress passed the Resolution Trust Corporation Completion Act. This act
served to phase out the RTC beginning with a transition period in April 1994. The RTC had worked fast enough to allow Congress to move up the complete termination of the RTC from December 31, 1996, to December 31, 1995. Given the foregoing occurrences in 1993, there was clearly less political pressure to achieve book value reduction goals than in 1991 or 1992. RTC commercial real estate sales (not just hotels) totaled 7,031 between 1989 and 1993, with 5,814 occurring before 1993.\(^\text{7}\)

**Monitoring is ineffective**

One of the major agency problems in the savings and loan crisis was ineffective monitoring. This was embodied in the policy engaged in by federal regulators known as regulatory forbearance. This is a policy where insolvent banking institutions were permitted to continue operating in the hope that conditions would improve enough for them to recover. Additionally, regulators feared that closing these institutions would have too much of a negative impact on the solvency of the deposit insurance fund. Research indicates that between 1980 and 1988, insolvent institutions remained open for an average of approximately 17 months after being declared insolvent. In one case, a bank that was declared insolvent in 1979 was still operating in 1988.\(^\text{8}\)

The policy of regulatory forbearance only served to delay dealing with the problem. The delay helped increase the magnitude of the problem the RTC had to deal with later. The increasing number of insolvent institutions served to deplete the deposit insurance more rapidly and increased the need to speed up the disposal of assets at insolvent institutions. This in turn led to the book value reduction goals previously discussed and the need for appraisals that could help accomplish that goal.

Given the evidence that "aggressive" appraisals contributed to the banking crisis of the 1980s, the literature on appraisal accuracy is surprisingly limited. Moreover, only a modest amount of research has focused on specific types of commercial real estate such as hotels. However, the appraisal accuracy literature generally supports the notion that appraised values are affected by the agency relationships in the process and the motivations of the parties involved.

Appraisal "accuracy" is generally measured as the difference between the sales price and the appraised value expressed as a percentage of the sales price. Accordingly, a negative difference indicates the appraised value is lower than the sales price. The earliest research examined mean absolute differences with only three hotels in the sample.\(^\text{9}\) However, the authors of this research recognized that the sign of the difference is of particular importance to real estate investors and updated their findings. The research disclosed a wide variety of differences across property types such as sales prices exceeding appraised values by
nearly 24 percent for apartments and appraised values exceeding sales prices for hotels by more than 5 percent. This indicated that these differences could vary across property types, region, and, perhaps, different years.

The first study that looked at signed differences over time revealed changes in percentage amounts across property types as well as during different phases of the real estate cycle. Since many of the differences were statistically different from zero, it is believed that certain properties were easier for appraisers to value than others. Other real estate researchers argued that agency relationships in the appraisal process play a more important role than specific property characteristics or flaws in appraisal methodology.

Research was subsequently completed involving hotels that examined the agency relationships involved in the process along with economic circumstances and hypothesized motivations of the parties involved. Using differences between sales prices and appraised values, the findings revealed changes in signs and percentages across time. Additionally, the research found that the time period when the appraisal was completed and the identity of the appraisal client (either the RTC or institutional lenders such as banks) had significant effects on the results.

Existing literature has revealed that differences between appraised values and sales prices of hotels will change over time. The literature has also lent support to the notion that the agency relationships and the motivations of the parties in the appraisal process can have an impact on appraised values. Accordingly, this research will examine the values of hotels appraised for the RTC to see if the results were impacted by the goals and motivations of the RTC.

**FDIC supplied data**

The data for this study were supplied by the FDIC. The data included hotel appraised values and sales prices from RTC auctions held between 1989 and 1994. The variable of interest is the percentage difference between the appraised value and the sales price which is calculated as \( \frac{\text{appraised value} - \text{sales price}}{\text{sales price}} \). Therefore, positive differences represent appraised values exceeding sales prices while negative differences refer to sales prices exceeding appraised values. Sales prices were adjusted to the date of appraisal using the Cornell Index, a hedonic index based upon changes in key factors affecting hotel sales prices.

Statistics compiled by the FDIC indicate a total of 1,617 FDIC-insured bank failures in the United States between 1980 and 1994, or 9.1 percent of total. High bank failure states are considered to be those in the upper quartile in terms of percentage of banks that failed, meaning a failure rate of approximately 12.5 percent and above. The states in this upper quartile included Alaska, Arizona, California, Connecticut, District of...
Columbia, Louisiana, New Hampshire, Oklahoma, Oregon, Texas, and Wyoming. Hotels with sales prices below $1 million were excluded to avoid inclusion of time-share properties and partial interest. The differences were subsequently examined for normality. One outlier was removed, leaving a total sample of 124 hotel appraisals, including 40 from high bank failure states. A breakdown of the samples by year is shown in Table 1.

Given the need for the RTC to dispose of non-performing assets quickly, particularly in states with a high number of bank failures, this study hypothesizes that appraisals in these states were lower than appraised values. As discussed earlier, lower appraised values would make bids more readily acceptable, meaning quicker sales and helping the RTC meet its asset reduction goals. The expectation is that the mean differences for hotel appraisals in the high bank failure states are going to be significantly less than in other states.

As previously discussed, legislation was enacted in 1993 that dictated the eventual takeover of the RTC by the FDIC and the demise of the RTC altogether. By this time, a significant number of assets had been sold. Furthermore, economic conditions in the hotel industry were much improved as compared to 1991, one of the worst years for the U.S. lodging industry since the 1970s. With less pressure to sell properties quickly, this may not have forced appraised values lower as in the early years of RTC operations. Therefore, the expectation is that mean difference for hotel appraisals completed in 1993 will be higher than those before 1993.

The next step in the analysis is to examine the explanatory power of these factors in a regression model, which will utilize variables related to the factors previously discussed, appraisals completed in

### Table 1
 RTC hotel appraisals by year

<table>
<thead>
<tr>
<th>Year</th>
<th>Total sample</th>
<th>Hotels in high bank failure states</th>
<th>Hotels in other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>1990</td>
<td>15</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>1991</td>
<td>38</td>
<td>12</td>
<td>26</td>
</tr>
<tr>
<td>1992</td>
<td>44</td>
<td>14</td>
<td>30</td>
</tr>
<tr>
<td>1993</td>
<td>23</td>
<td>5</td>
<td>18</td>
</tr>
<tr>
<td>1994</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

**Note:** The table shows the hotel appraisals used in the analysis. The first column lists the year; the second column details the number of appraisals in the entire sample; the third column lists the number of appraisals completed in the high bank failure states.
high bank failure states, and appraisals completed in 1993 or later. Additionally, a combination variable will be added to the model that represents those properties appraised in high bank failure states and in 1993 or later. This last variable is created by multiplying the high bank failure variable by the 1993 variable. This variable will also be tested for significance as there still may have been strong incentive to sell properties quickly in the high bank failure states even after 1993. Therefore, the full regression model is as follows: % Diff = Regression Intercept + High Failure + 1993 + (High Failure and 1993) + Error Term. Variations of this model will be examined to assess which model is the best.

Results show differences

Differences between appraised values and sales prices for hotels in high bank failure states were compared to other observations in the sample using a t-test. Additionally, differences between appraised values and sales prices for hotels appraised in 1993 or later were also compared to other observations using the same test. The results are shown in Table 2.

T-test results lend support to the hypotheses. The mean difference in the high bank failure states was negative and significantly lower than the mean difference for appraisals completed in other states. Additionally, the mean difference for appraisals completed in 1993 or later was positive and significantly higher than the mean difference for appraisals completed in a prior period. Although the difference between appraised values and sales prices for all properties before 1993 was negative, the difference is very small (only -7 percent) and not significantly different from zero.

<table>
<thead>
<tr>
<th>Factor of Interest</th>
<th>Mean difference of appraisals related to factor of interest</th>
<th>Mean difference of other appraisals in sample</th>
<th>T-test for significant differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hotels in high bank failure states</td>
<td>-8.3%</td>
<td>9.0%</td>
<td>3.85**</td>
</tr>
<tr>
<td>Hotels appraised in 1993 or later</td>
<td>18.9%</td>
<td>-.7%</td>
<td>-2.41**</td>
</tr>
</tbody>
</table>

Note: The table details the results of t-tests conducted on the sample. The first column lists the factor of interest. The second column provides the mean percentage difference between appraised value and sales price for those appraisals described in the first column. The third column represents the mean percentage differences for other appraisals in the sample. The fourth column lists the T-statistic from the test for significant differences between the second and third columns.

**Significant at the .05 level.
***Significant at the .01 level.
The results of the five different regression models are shown in Table 3. All of the variables were significant at a .05 level of significance or greater. The simple regression models with one independent variable are significant, but have only limited explanatory power. However, the coefficient of the high bank failure variable has a negative sign as expected. This means that appraised values of hotels in high bank failure states were less than sales prices. Conversely, the coefficient of the 1993 variable has a positive sign, also as expected.

The best model includes all three variables, including the interaction between high bank failure and 1993. The coefficient of this variable is significant and negative, meaning that appraised values were less than sales prices for those hotels located in high bank failure states and appraised in 1993 or later. This lends support to the notion that the cleanup problem was particularly severe in high bank failure states and that the RTC may have continued to influence appraised values downward in those states even in 1993 and later.

The study hypothesized that the agency problems of moral hazard and regulatory forbearance that contributed to the banking crisis also had an impact on RTC operations. These problems may have led RTC officials to influence hotel appraised values downward in states with a high number of bank failures to make more bids acceptable and “get the assets off the books” quickly. The results tend to support this notion, with hotel appraised values being significantly less than market values in high bank failure states, even after the 1993 legislation that established guidelines and proposed the

<table>
<thead>
<tr>
<th>Regression model</th>
<th>Intercept</th>
<th>High failure 1993</th>
<th>High failure 1993 and 1993</th>
<th>F*</th>
<th>Adjusted R2</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>9.03***</td>
<td>-17.36***</td>
<td></td>
<td>12.47***</td>
<td>8.5%</td>
</tr>
<tr>
<td>(2)</td>
<td>-6.7</td>
<td>19.54***</td>
<td></td>
<td>11.94***</td>
<td>8.2%</td>
</tr>
<tr>
<td>(3)</td>
<td>4.82</td>
<td>-15.80***</td>
<td>17.70***</td>
<td>11.97***</td>
<td>15.1%</td>
</tr>
<tr>
<td>(4)</td>
<td>-57</td>
<td>28.91***</td>
<td>-40.60***</td>
<td>12.88***</td>
<td>16.2%</td>
</tr>
<tr>
<td>(5)</td>
<td>3.03</td>
<td>-10.64**</td>
<td>25.21***</td>
<td>-29.96**</td>
<td>10.26***</td>
</tr>
</tbody>
</table>

Note: The table details the results of t-tests conducted on the sample. The first column lists the factor of interest. The second column provides the mean percentage difference between appraised value and sales price for those appraisals described in the first column. The third column represents the mean percentage differences for other appraisals in the sample. The fourth column lists the T-statistic from the test for significant differences between the second and third columns.

**Significant at the .05 level.
***Significant at the .01 level.
takeover of RTC operations by the FDIC.

Further research could be completed regarding the interaction between agency problems such as moral hazard and regulatory forbearance and economic circumstances regarding their impact on appraised values of other types of real estate. Further investigation could also be conducted on how the lack of readily available information affects the hotel appraisal process. Overall, it appears that further research into agency relationships in the process may bring forth some interesting insights with respect to appraisal accuracy.

References


Ibid., 13.

Ibid.


Michael C. Dalbar is an assistant professor in the Department of Tourism and Convention Administration at the University of Nevada-Las Vegas.
Lodging real estate finance: Securitization

by A. J. Singh

Commercial Mortgage Backed Securities (CMBSs) introduced to the U.S. lodging industry in the early 1990s were a panacea during a period of severe shortage of debt capital. These instruments changed commercial real estate capital markets by providing flexibility and liquidity to an otherwise illiquid investment. As a relatively new form of financing to the lodging industry, the mechanics of securitization, the types of CMBS instruments, and their structure are not well understood. The article illustrates the process of securitization and its importance as a significant source of debt financing to the lodging industry.

An overbuilt lodging market, devaluation of hotel real estate, delinquent hotel loans, the S&L debacle, and a national recession all combined to shut off funding for hotel projects in the early 1990s. In particular, traditional lending sources such as commercial banks, life insurance companies, and S&Ls stopped lending for hotel projects. A survey of lenders in 1990 by Hospitality Valuation Services indicated that only 33 percent of lenders would consider new hotel loans. Most lenders did not plan to return to hotel lending in the near future. In fact, during this period they were more concerned with disposing of non-performing hotels in their portfolio or working with hotel owners to restructure their loans.

The sentiments of most investors during the early 1990s are reflected in an investment survey conducted by PKF Consulting. The survey results showed that hotels were risky investments and accordingly reflected higher interest rates, capitalization rates, debt coverage ratios, loan-to-value ratios, return requirements, and other investment and lending terms. The true credit crisis was accurately stated in a research newsletter by Grubb & Ellis, a real estate advisory firm: “The truth seems to be that the crisis in real estate finance, where it exists, is not a crisis born of a shortage of loan funds. Instead it is one of confidence, on the part of both lenders and buyers, in the integrity...
of investment real estate in a severely overbuilt market."

During the cyclical downturn and retrenchment of traditional lending sources, alternative sources of financing emerged to partially fill in the credit gap and take advantage of the depressed values of hotel real estate. In particular, new debt instruments such as commercial mortgage backed securities (CMBS), collateralized mortgage obligations (CMOs), and real estate mortgage investment conduits (REMICs) emerged during this period as new investment vehicles and have revolutionized the way in which commercial real estate is financed.

Securitization is explained

Given the importance of debt securities in financing commercial real estate and hotels, in particular, it is imperative that hotel investors and academicians understand securitization. The purpose of the study was to describe the fundamentals of the securitization process and the basic structure of mortgage-backed securities. Secondary literature, which includes textbooks, journal articles, research studies, and other significant documents from each of the periods studied, was relied on. Commenting on historical research, Baumgartner states, "using the historical approach, the researcher endeavors to record and understand events of the past. In turn, interpretations of recorded history hold to provide better understanding of the present and suggest possible future directions." Being a relatively new vehicle for financing commercial real estate, a cogent review of this "new order," a systematic and comprehensive understanding of CMBS, will increase the transparency for hotel investors in these instruments.

Financing is changed

A major change in the way that commercial real estate in general and hotel real estate in particular is being currently financed is the linkage of the originators of mortgage loans with the broader capital markets. This linkage started with the development of a secondary market for real estate loans. Until the 1970s, when a bank or another financial institution originated a loan it was held on its balance sheet until the loan was paid off. By participating in the secondary market, lenders were able to spread their underwriting risk and reduce market risk by diversifying their loan portfolio outside their immediate geographic area.

Securitization is a process by which an asset, such as a hotel mortgage, is standardized into individual units, such as shares. An investor in these shares is a partial owner of a large pool of mortgages. The direct-sale program started to revolutionize mortgage lending by letting the mortgage originator remove mortgages off its books and sell them to another party. However, the creation of securities carried the revolution to greater heights by converting the mortgage instrument into a packaged product, which could then be sold in an organized market just like a stock or bond.\(^5\)
Process involves steps
The process of securitizing commercial mortgages involves a series of steps and includes a variety of organizations from initial origination to final sale of the bond to investors. The securitization process is discussed and the process flow is outlined in Figures 1 and 2.

- Origination and underwriting: Commercial mortgages, which form the collateral for all commercial mortgage securities (CMBS), are originated either by traditional portfolio lenders such as commercial banks and life insurance companies or through the investment bank's own origination system known as conduits. In many cases, investment banks set up conduit programs with licensed mortgage bankers, known as correspondents. Under this arrangement, the correspondent bank is responsible for underwriting and closing the loan. As the underwriter, it will determine the collateral's ability to function as an income producing and debt servicing property over a specific period.

- Clearly, the quality of underwriting of the individual loans is critical to its ultimate sale for securitization, pricing of the certificates, and assigned rating. The investment bank conduit is responsible for pricing the loan, reviewing loan documents, and funding the loan. Once the loan is closed by the originating institution (portfolio lender or correspondent), it is sold to the investment bank at a predetermined rate, which in turn packages the pool of loans and sells them as a bond (security) in the capital market. This cycle, which provides more capital to fund more loans, is illustrated in Figure 1.

- Underwriting of the loan pool: While underwriting the individual loans, the originator

---

**Figure 1**
Conceptual flow of funds

---

58  FIU Hospitality Review / Spring 2003

Contents © 2003 by FIU Hospitality Review. The reproduction of any artwork, editorial or other material is expressly prohibited without written permission from the publisher, excepting that one-time educational reproduction is allowed without express permission.
evaluates the economics of individual properties. In this underwriting step, the underwriter reviews issues related to the entire pool such as industry concentration, geographic concentration, borrower concentration, average life of coupon (interest rate), and average maturity. In consultation with rating agencies, the most appropriate mix of loans is determined in this step.

- **Warehousing:** After origination and underwriting the mortgage, and prior to securitization, loans are said to be warehoused. These loans are kept with the portfolio lender if they originated the loan or placed in a depository if a conduit originated mortgages. The loans are warehoused until securitization closing.

- **Structuring and credit enhancement:** Next, the pooled mortgages are structured to create the bond, which will ultimately be sold to investors. The goal of the structuring process is to experiment with various combinations of mortgages and security classes to achieve an optimal price, which appeals to different levels of investors.

  Sally Gordon, vice president and senior analyst for Moody's Investor Service, illustrates the structuring of a $100 million pool of commercial mortgages, in a typical example (Table 1). As noted in Table 1, a $100 million pool of commercial mortgages may be divided into three classes (tranches). Using the most common payment structure, known as “waterfall,” investors in Class A bonds will receive principal and interest until they are paid off in 3.5 years, while B and C bond holders will get only interest payments during this period. Once Class A bondholders are retired (fully paid), holders of B class bonds will receive principle and interest for the next 1.5 years until they are retired. Finally, after five years, investors in C class bonds will receive the principle and remaining interest balance outstanding.

  While structuring securities, it is important to build in credit enhancement to protect against potential cash flow delays and shortfalls. This is mainly due to defaults within the pool of mortgages. There are a variety of techniques used to enhance security

<table>
<thead>
<tr>
<th>Class</th>
<th>Size (Million)</th>
<th>Rating</th>
<th>Coupon</th>
<th>Average life</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>$85.0 MM</td>
<td>AAA</td>
<td>7.00%</td>
<td>3.5</td>
</tr>
<tr>
<td>B</td>
<td>$11.0 MM</td>
<td>BBB</td>
<td>8.20%</td>
<td>5.0</td>
</tr>
<tr>
<td>C</td>
<td>$4.0 MM</td>
<td>Not rated</td>
<td>variable</td>
<td>variable</td>
</tr>
</tbody>
</table>

Source: Sally Gordon, vice president, Moody's Investor Service.
credit, such as third party letter of credit, a surety bond, or structural enhancements through reserve accounts, cross-collateralization, cross-default, and creating senior and subordinated classes of securities. A brief explanation of some of these terms will further clarify the importance of incorporating credit enhancements into bond structures.

- **Reserve accounts:** A variety of reserve requirements may be required by rating agencies to protect against variation and adequacy of cash flow. In the case of resort hotels for instance, a reserve account to cover interest rate coverage during slow seasons, will mitigate this risk.

- **Cross-collateralization, cross default:** By cross-collateralizing the underlying properties in a mortgage pool, each property loan is pledged against other loans in the pool. Thus, if a particular property has insufficient cash flow to make loan payments, cash flows from several properties can be used to make payments on a property. This protects the investor by reducing the default risk of the total mortgage pool. Cross default adds further enforcement penalties to the cross-collateralization as lenders have the right to call all loans in the pool if a single loan is in default.

- **Senior and subordinated classes:** The process of subordination creates a senior class of bondholders who receive payment before other (subordinated) classes. Hence, the security structure does not reduce risk but spreads the risk among the different classes of bondholders. This sequential form of payment, in effect, protects the senior bondholder (Class A for instance) at the expense of the subordinated class (B or C class), which creates the notion of “credit enhancement.”

**Rating agencies review**

The four rating agencies that rate CMBS, Standard and Poor’s, Moody’s, Fitch, and Duff and Phelps, provide a third party opinion on the quality of each bond in the structure, and suggest the necessary credit enhancements required to achieve a specific rating level. To initiate the review process, the investment bank, loan originator, or underwriter’s counsel submit collateral, mortgage, and security documents to one of the rating agencies. Starting with this information, these rating agencies use other due diligence reports such as appraisals and engineering or environmental reports to form an opinion of the critical characteristics of the underlying loan pool and assign ratings to each tranche of the CMBS certificate. Investment grade securities are assigned ratings from AAA to BBB. The highest rating possible for a CMBS is AAA or Aaa, which indicates that the rating agency believes in a very high likelihood of full and timely payment of principal and interest. Securities rated double-B and single-B are considered to be below investment grade (Table 2).
Servicer selection critical

The servicers (selected by the investment bank and originator of the loan) are a critical part of the securitization process. They are responsible for the collection of monthly loan payments, keeping a record of the payments, monitoring the condition of underlying properties, preparing reports for the trustee, and transferring collected funds to the trustee for payment. Servicers may be further subdivided into three types. The Master Servicer performs most of the functions previously mentioned and transfers to the Special Servicer any non-performing loans. The latter, in turn, either conducts a “work out” (restructuring the loan) or forecloses on the loan and sells the property. Both the Master Servicer and the Special Servicer are allowed to subcontract with a Sub-Servicer who specializes in a particular property type (such as hotels) or market area.

The trustee, an independent entity selected by the originator and investment bank, represents the collective interests of CMBS investors. Therefore, the trustee holds legal title to the trust’s estate, which includes funds on deposit and collateral property of the trust. The basic services of the trustee include holding the mortgage collateral, issuing CMBS certificates, passing principal and interest payments collected by the servicers to the certificate holders (investors), ensuring that the servicers act in accordance with the terms of the servicing agreements, and appointing new servicers as needed. Currently, State Street Bank, LaSalle Bank, National Bank, and Bankers Trust are the leading trustees for CMBS issues.

Closing involves transfers

During closing all legal documents such as pooling and service

Table 2

<table>
<thead>
<tr>
<th>Moody's Rating</th>
<th>Explanation</th>
<th>Standard &amp; Poor's</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aaa</td>
<td>Prime quality</td>
<td>AAA</td>
<td>Bank investment quality</td>
</tr>
<tr>
<td>Aa</td>
<td>High grade</td>
<td>AA</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>Upper medium grade</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Baa</td>
<td>Medium grade</td>
<td>BBB</td>
<td></td>
</tr>
<tr>
<td>Ba</td>
<td>Lower medium grade</td>
<td>BB</td>
<td>Speculative</td>
</tr>
<tr>
<td>B</td>
<td>Speculative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caa</td>
<td>Speculative to near or in default</td>
<td>CCC</td>
<td></td>
</tr>
<tr>
<td>Ca</td>
<td>Speculative to near or in default</td>
<td>CC</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Lowest grade</td>
<td>C</td>
<td>Income bond</td>
</tr>
<tr>
<td>D</td>
<td>In default</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

agreements, final ratings, and the funding are authorized. The pool of mortgages, which is the underlying collateral for the CMBS, is transferred to the trust for the benefit of all class holders of the certificates.

Simultaneous with the closing, loans are transferred from the depository or portfolio holders to the trustee in exchange for the requisite funds, and the trustee issues certificates, representing undivided interest in the trust which owns the collateral pool. The certificates are either privately placed or publicly offered by an investment bank. Typically insurance companies, pension funds, and commercial banks purchase the investment grade CMBS bonds.

Below investment, grade tranches are usually sold to prominent real estate investment funds that have the sophistication necessary to properly underwrite the risk inherent in these tranches. A tranche is a term used to describe classes of CMBS securities such as “AAA.” It follows that the liquidity of the CMBS certificate is a function of its investment grade. Higher credit rated instruments are more liquid and therefore enjoy a larger and more active secondary market, while the lower credit rated tranches require more due diligence and are relatively non-liquid.

Securitization has advantages

As stated by Arnold, there are four principal advantages of securitization:

* Small investment: Securitization reduces the amount of capital that an investor needs to invest in the asset, therefore giving small investors (the public) access to the mortgage market.
* Diversification: Since the entity issuing the security can pool a large number of mortgages to back the securities, the risk exposure of the investors is reduced due to diversification.
* Liquidity: Real estate has always been maligned due to its non-liquid nature. The creation of debt securities (such as stocks in a corporation) enables investors to buy and sell these units in an organized market.
* Flexibility: More advanced structures of mortgage securities create various classes of these securities to suit the risk/return preferences of different investors.

Securities are flexible

Since they were first started, mortgage-backed securities have evolved into very efficient and flexible financial products. The following sections identify the most common type of mortgage-backed securities and briefly explain their structure. Many of these mortgage-backed securities had originally packaged home mortgages but have since evolved to include commercial mortgages, including hotel mortgages. In fact, mortgage-backed securities are also known as commercial mortgage-backed securities.

There are two types of mortgage-backed securities (MBS):
Figure 2
CMBS securitization process

Borrower
(For commercial real estate construction or acquisition)

Loan Origination and Underwriting
(portfolio lender or conduit)

Undertaking

Mortgage Loans

Loan Pool Underwriting
(Assessment of overall quality of loan pool by originator)

Selection of loans for structuring

Warehouse
(Collection of loans until sufficient quantity for securitization)

Ratings
Securities

Rating Agency Review
(Selection of rating from investment grade to below investment grade)

Structuring and Credit Enhancement
(Creation of classes of bonds and risk reduction)

Required documents sent to rating agency

Loans placed in trust

Closing
(Legal documents, final rating, service agreements and final funding)

Trust (REMIC tax status)
(Holds legal title to mortgage collateral and issues CMBS securities and distributes monthly payments to investors)

Loan Servicing
(Master Servicer and Special Servicer collect monthly payment from borrowers and remit to investors)

Distribution and Investment
(CMBS certificates sold to investors)

Investor Tranche A

Investor Tranche B

Investor Tranche C

Contents © 2003 by FIU Hospitality Review. The reproduction of any artwork, editorial or other material is expressively prohibited without written permission from the publisher, excepting that one-time educational reproduction is allowed without express permission.
pass-through securities and mortgage-backed bonds. A pass-through security represents a pool of mortgages. Owners of this security earn a pro-rata share of principal and interest, which is passed through to them. Many of the investors of these securities include institutions such as pension funds, insurance companies, bank trust departments, and mutual funds. In the case of mortgage-backed bonds, originators such as banks or mortgage companies use pools of mortgages to issue bonds to investors. Like corporate bonds, mortgage-backed bonds pay interest on a semiannual basis and all principal at maturity.

The main difference between a pass-through security and a mortgage-backed bond is that, with a pass-through security, the principal and interest are being amortized over the life of the security, so upon maturity the investor has already received the full payment of principal and interest. In the case of mortgage-backed bonds, interest is paid semiannually, but the principal is paid to the bondholder at maturity. Besides the difference in payment structure, they are similar in that pools of mortgages collateralize them.

These early financial instruments suffered from two main drawbacks. First, they were single-class instruments, in that all investors shared the same return because they held identical securities with identical cash flows and identical maturities. Second, borrowers have a tendency to prepay their mortgages in periods when interest rates are declining. As a result, the stated return of a pass-through security was sometimes much lower than actual returns. This was because "the investor who receives an unanticipated early return of his investment must shorten his horizon and reinvest at lower interest rates."

**Drawbacks are rectified**

The drawbacks of MBSs were rectified by the creation of a new financial instrument called a collateralized mortgage obligation or CMO. The main advantage of a CMO is that it changed the security from a single-class financial instrument to a multi-class instrument. This added flexibility made CMOs a more attractive form of mortgage-backed security. The first CMO was created by First Boston in 1983. Each CMO issue is divided into various classes of securities known as tranches. The cash flow that each tranche receives is based on a predetermined plan. It is possible to consolidate all prepayment and interest risk into one segment of the issue (for example, Class E). Therefore, investors with a higher tolerance for risk may purchase this type of security.

There are an infinite variety of CMOs, ranging from plain vanilla types, in which cash flow from the underlying pool of mortgages is distributed in a sequential order, to more complex structures, such as stripped CMOs. In a stripped CMO, the principal and interest are divided between two classes unequally. For example, one class
may receive the entire principal and the other class all of the interest." Like MBSs before them, CMOs suffered from some drawbacks. A CMO is not considered to be a pass-through security and is therefore treated like a bond. This added considerable debt to the balance sheets of the issuing institutions. To alleviate this problem, issuing institutions such as investment banks placed these securities in a trust. The trust structure created adverse tax consequences for the issuer, as the IRS taxed these grantor trusts as they would a corporation.

**REMIC makes debut**

Real estate mortgage investment conduits (REMIC) made their debut into the securitization arena after Congress passed the Tax Reform Act of 1986. The major impetus for creating REMICs was the need to replace the trusts previously used to create CMOs because of their inherent tax problems. The creation of the REMIC essentially made a CMO-like product, that is, a multi-class security, but with the added advantage of providing flow-through tax treatment.

Some experts explained it this way: "Under the 1986 tax law, a REMIC is a tax entity (not necessarily a legal form of organization such as a corporation or partnership) that can be created by simply selecting a REMIC tax status and maintaining separate records relative to the mortgage pool and management of funds related to the pool." As such, "issuers can 'sell' mortgage assets to the REMIC, which then can issue multi-class securities (like CMOs). The main difference between CMOs and REMICs is that CMOs are bonds backed by mortgages, while REMICs are simply entities that facilitate the securitization of pools of mortgages." Simply stated, a REMIC is a CMO without its tax disadvantages.

Bruggeman and Fisher state: "In summary, by providing for REMICs, a tax-exempt conduit has been created by Congress through which CMOs may be issued. This allows for the creation of mortgage-backed securities with multiple maturity classes. This should provide more choices to more investors and hence broaden the participation by investors in mortgage-related securities."

The 1990s were a time of tremendous change with regard to financing the lodging industry. The decade began with a period of capital scarcity due to the excesses of the 1980s. However, the scarcity spurred innovations in real estate financing instruments. With the introduction of securitization, which is an extension of financial engineering or structured finance to the commercial real estate industry, many new and creative financial instruments were introduced, such as Commercial Mortgage Backed Securities, Collateralized Mortgage Obligations, Real Estate Mortgage Investment Conduits, and Real Estate Investment Trusts.
References

'HVS Financial Services, Hotel Lender Survey, Mineola, N.Y., (Summer 1990).


Sally Gordon, "How to Build A Bond," CMBS World 1, no. 3 (Fall 1999): 16-19.


Duett.


Scherrer and Bolick.

Bruggeman and Fisher.

A. J. Singh is an assistant professor in the School of Hospitality Business at Michigan State University.
Kosher airline food: A logistical challenge

by Orit Malka and Audrey C. McCool

Providing meals to passengers on aircraft requires a complex logistical system if it is to be done successfully. Variations to that system are required if special meals, such as kosher ones, are to be provided since it entails unique system challenges. The authors discuss service requirements, the challenges they pose to the inflight meal service logistical system, and some of the ways in which these challenges are met.

Inflight food service for passengers is unique in many ways and requires a more complex logistical support system than most other food services. The separation of the food preparation from the product consumption both in terms of time and location means that careful monitoring of food holding and transfer procedures is required. Also, the selection of food products for these meals requires close attention to ensure that the products are able to withstand the holding and transport procedures, yet be safe and of high quality when served to airline passengers.

Because of these requirements, the incorporation of unusual menu items, such as kosher meals, into the complex logistical system required to support inflight food service has significant logistical and cost implications. These implications are significant as the incorporation of meals such as kosher ones requires deviation from the assembly line based mass production system that is the basis of cost effective production and delivery of food and beverages for inflight food services.

Kosher demand grows
While kosher foods have always been in demand by persons who have chosen to observe Jewish religious dietary laws, in recent years these foods, produced under strict processing and preparation standards, have gained increased popularity with non-Jewish consumers. Persons who are vegetarians, lactose intolerant, or simply health conscious may perceive kosher food
products to be purer or safer than other foods because of the strict standards under which they are produced.

Indeed, consumer demand for kosher products has grown in recent years and is expected to continue growing. Kosher food products experienced a 13 percent growth in sales from 1997 to 1998, while overall sales in the food industry grew by only 4.2 percent. Information from Kashrus agencies, agencies that certify foods as meeting kosher standards, and other kosher experts indicate that 2,500 new kosher products were introduced into the market in 1999 alone. Additionally, kosher meals and food items are being introduced into the gourmet, natural foods, and health specialty markets.

This growth in consumer demand for kosher products is likely to be reflected in a corresponding growth in the demand for kosher meals on board aircraft, particularly on international flights since there is more full meal service on these extended flights in comparison to the current trend for only snack service on shorter domestic flights.

**Meals require efficiency**

Each airline specifies precisely what will be boarded on their flights for all types of food and beverage services; inflight caterers must meet those specifications precisely. This requirement can be achieved either by using products which the airline purchases directly from product manufacturers and which are delivered to the caterer for use in preparing meals or snacks for the airline or by using products which the inflight kitchen itself purchases from national or local suppliers. In all cases, regardless of the purchasing process, all supplies received by the inflight kitchen must meet the U.S. Food and Drug Administration (FDA) and the Hazard Analysis of Critical Control Point (HACCP) specified minimum hygiene conditions, temperatures, quality, weight, and grade. Once accepted, delivered supplies must be stored in space allocated specifically to each airline. This space allocation is required in all types of storage, refrigerated, frozen, and dry stores.

Because of the time difference between product production in the inflight kitchen and the consumption of the food products in the air, cook-chill or cook-freeze methodologies have been adopted and must be monitored carefully to prevent excess exposure of cooked items to temperatures where food-borne pathogens can survive and grow, potentially causing food-borne illness. Once prepared, the hot foods for traditional meals are portioned onto individual plates or casseroles, chilled, and rethermalized on board the aircraft prior to service to the passengers. Cold food items, along with eating utensils and condiments, are placed on the meal service trays and stored under refrigeration until meal or snack service is initiated on board the aircraft. The number of meals boarded on a flight can be adjusted as passenger counts change up until
the last passenger is seated aboard the aircraft. During onboard meal service, the heated hot food containers are placed onto the preset trays and then served to passengers. Flight attendants can check the hot foods as they are heating to verify temperature, and they can see and check the cold food items that have been pre-set on the trays. Figure 1 illustrates the logistical flow of products for the preparation and service of conventional meals on board aircraft.

Figure 1
Logistical system for producing and serving conventional meals on board aircraft

- **Food Sources**
  - Airlines and/or caterers prepare specifications to airline standards and bid for best price/service on the open market
- **Shipping**
  - Standardized shipping to caterers through distributors specializing in meeting the needs of the inflight foodservice industry
- **Receiving**
  - Check for product quality and quantity in accord with HACCP standards, airline/caterer product specifications, and purchase order quantities
- **Storing**
  - Items stored in accord with caterer's storage policies with emphasis on keeping each airline's products separated, as appropriate for the product
- **Cooking**
  - Product preparation done in catering kitchen in large quantities in accord with airline recipes/specifications
- **Packaging**
  - Products packaged/plate/set-up on trays in catering kitchen utilizing assembly line procedures
- **Airport Commissary**
  - Prepared meals/trays stored under refrigeration in standardized boarding equipment for a minimum of 4 hours prior to being boarded onto aircraft
- **On the Plane**
  - Meals rethermalized in convection ovens or served cold to passengers as appropriate. Flight attendants unwrap/open entrees as they are served
- **Off the Plane**
  - Equipment is washed and reused

*Mulka and McCool* 69
Kosher meals are categorized as "special meals" by the airlines. Thus they have to be ordered 24 hours ahead of the scheduled flight departure time. Even though the inflight kitchen may have a meal count for kosher meals for a flight 24 hours ahead of the scheduled flight time, they still have to estimate the number of frozen kosher meals that they will maintain in storage since most inflight kitchens are not able to produce kosher meals. Their supply must consist of varied kosher meals so that they can meet the specifications of the several airlines served by the kitchen. Also, because the inflight kitchen does not prepare the kosher meals onsite, they must forecast demand to have an adequate supply on hand, but not so many that they cannot be completely utilized before they deteriorate in quality and cannot be used to service flights.

Kosher adds challenges

Another difficulty encountered is the communication gaps within the information flow, beginning with the placement of the meal request to the actual meal service. Flight delays, unpredicted flight schedule modifications, and passengers changing flight reservations (often to a different flight very close to their originally scheduled flight) contribute to problems in the information flow to inflight kitchens. Thus a passenger who ordered a kosher meal for one flight may actually be on a different flight. Unless great care is taken with special meal communications and the inflight caterer has a sufficient stock of tempered (or partially thawed) kosher meals acceptable to the airline on hand and available to be boarded onto a flight at the last minute, it is likely that the kosher meal would not follow the passenger to the new flight. It is also likely that the kosher meal originally ordered may be boarded onto the original flight and be wasted.

Meals prepared off site

The word "kosher" is an adjective meaning "fit or proper." Food is considered kosher if it is prepared in accordance with Jewish dietary laws. The difficulty of producing kosher meals within conventional inflight kitchens is due to the complexity of these dietary laws. To prepare meals onsite, an inflight kitchen would have to be customized to meet all the proscriptions and prescriptions of these laws. Further, FDA Food Codes and HACCP rules mandated for conventional inflight catering kitchens are insufficient to fulfill the food handling and processing requirements defined in the complex kosher dietary laws. Figure 2 summarizes the process of producing and maintaining products as kosher throughout the complex logistical system required for onboard meal service.
Figure 2
Producing and maintaining food products as kosher throughout the logistical system for inflight food services

Food Sources
Use only permissible sources of food Slaughter according to Jewish dietary laws Supervised by Shochet and Mashgiach Purchase only from kosher certified plant

Shipping
Cryovac Packaging Internal Seal External box seal

Receiving
Check for internal and external seal Check for kosher plant stamp Rabbin supervise receiving

Storing
Meat items separate from dairy items Ensure kosher status of eating and service equipment

Cooking
Do not mix meat/poultry items with dairy products Follow cooking equipment guidelines Observe special provisions for Shabbat and Passover

Packaging
Cold condiments are separated from hot entrée Entrées are double wrapped and sealed Silverware is wrapped with cold condiments

Airport Commissary
Check that meal unit seal is intact Storage in separate freezer area Minimal handling is required no pop-out

Airline Responsibility
Keep seal intact until served to passenger

On the Plane

Off the Plane
Equipment is not reused

Kosher Meal Production Kitchen Responsibility

Malina and McCool 71

Contents © 2003 by FIU Hospitality Review. The reproduction of any artwork, editorial or other material is expressly prohibited without written permission from the publisher, excepting that one-time educational reproduction is allowed without express permission.
Examples of challenges that would have to be overcome within conventional inflight kitchens include the need to separate the production of products containing meat, fish, or poultry from dairy products or foods that contain dairy products; the need to have separate cooking, eating, cleaning, and service utensils for meat/fish/poultry and for dairy products or foods containing any dairy products; and the need to prepare cooking utensils and kitchen equipment prior to their use in the preparation of kosher food products. This last challenge is made more difficult in modern inflight kitchens since utensils made of porcelain, enamel, and plastic are considered to be porous; therefore, such utensils can never be completely cleaned as the koshering process requires.

**Ingredients are complicated**

In addition to the need to modify the structure and production flow, there are several other factors that inhibit the production of kosher meals onsite in an inflight kitchen. Some of these factors include the difficulty of obtaining kosher meat since there are only a very few slaughter houses or meat packing plants that produce or process kosher meat and poultry in the U.S. today. Thus, for example, if an inflight kitchen was required to provide a certain amount of kosher beef stew for an airline's flights, that kitchen would need to estimate the amount of beef required to make that stew very accurately. Then an order for that beef has to be placed well ahead of the date that it was needed since the order would be received from a slaughter house or packing company that was likely to be a thousand or more miles away from the inflight kitchen. Because of the perishability of the meat, unusual shipping costs would be incurred for express delivery of what would probably be a small amount of meat relative to the kitchen's usual non-kosher production quantities.

Further, no work can be done on the Sabbath; thus, no foods can be prepared during that day. Foods for meals for flights scheduled to depart from an airport on the Sabbath would have to be prepared at least one day prior to the flight's departure. During Passover, the dietary laws are even more strict; thus meals that would meet the standards for kosher during the rest of the year may not meet the standards for Passover, necessitating the preparation and holding of an additional stock of meals, all of which would need to be used by the close of Passover to prevent waste, and excessive costs due to waste. Finally, all preparation of kosher foods must be done under the direct supervision of a trained rabbi, and the cost of the rabbi's salary would become yet another operating expense of the inflight kitchen.

**Modifications assessed**

In order to learn more about the logistical system modifications that are needed to provide quality
kosher meals on board aircraft, the structured interview methodology was utilized. Representatives from three different stages in the logistical system were selected, kosher production kitchens, inflight catering firms, and airlines. The representatives selected for interviews from these three stages were purposely chosen in order to gather significant and varied information and to assure data quality and the credibility of the findings.

From the production kitchen group, three kitchens were selected that were different in size, production volume, production circumstances (i.e., such as production in a non-kosher environment), and geographic location. Since there are only a limited number of large inflight catering firms that provide food and beverage services to a majority of the airlines today, both in the U.S. and worldwide, the two major flight catering firms in the U.S. were chosen. However, key personnel interviewed from these firms were from different airport locations in order to gain information reflecting different airport circumstances. Finally, the three major U.S. airlines with both domestic and international flights were selected for interviews.

A combination of personal, telephone, and e-mail interviews was completed, guided by the structured interview questions developed for each of the three stages within the system. Each interview ranged from 30 to 60 minutes, and all personal and telephone interviews were tape recorded with the permission of the interviewees to increase the accuracy of the data collection and to maintain the flow of the conversation. Following each interview, the conversation was transcribed and labeled with the date, place, time, name, and title of the person interviewed. When interviews were completed, data were analyzed by means of content analysis.

Two types available

Two types of kosher meals are available in the market for the airlines to choose from, fresh and frozen. While any kosher production kitchen has the capability of providing either fresh or frozen meals, the type of meal that the production kitchen would contract to make for an individual airline depends on that airline's specifications, which are primarily based on the shipping time and distance to get the meal from the production kitchen to the inflight caterer servicing the airline at a particular airport.

Most kosher meals served by U.S. airlines to passengers are produced as frozen meals by a limited number of production kitchens, which also supply kosher meals in other sectors of the food service industry (i.e., prisons, hotels, etc.) The kitchens vary from very small, producing fewer than 2000 frozen kosher airline meals per month, to very large, producing more than 20,000 such meals per month. Since these kitchens service airlines throughout the U.S., the shipping time and distance generally mandate the use of frozen, rather than fresh, meals.
A limited number of inflight kitchens have the capability of producing kosher meals. These are primarily located at large airports on the east or west coast of the U.S. which service a large number of international flights, flights that have a higher demand for kosher meals because of the higher number of meals served per passenger per flight and the increased numbers of passengers who request kosher meals. A very limited number of caterers at these airports maintain a kosher production kitchen, which is completely separate from their primary production kitchen, which reflects airline preferences for serving fresh kosher meals on international flights. Generally, the airlines perceive fresh meals to be of a higher quality than the frozen meals; thus they want to serve the best quality possible to their international passengers, particularly their first class passengers.

Kosher ingredients necessary

There are now greater amounts of kosher items widely available because of the overall increase in the demand for kosher foods. This is particularly true for kosher certified items such as rice, pasta, or frozen vegetables. However, the availability of the protein portion of the meal, especially beef or poultry, is extremely limited because of the strict kosher dietary laws regarding ritual slaughter. Since a slaughterhouse incurs additional costs and the loss of production efficiencies when they produce kosher beef or poultry, many have chosen to not produce any kosher products. As a result, there are currently only a very limited number of kosher slaughterhouses in the U.S. Thus, kosher production kitchens must anticipate their protein product needs well in advance and work cooperatively with the slaughterhouses and the distributors of the kosher protein products at all times in order to maintain an adequate supply of beef or poultry to accommodate the kitchen's production schedule. An additional consideration is the increase in shipping costs for raw protein products which today's production kitchens incur since these kitchens are generally not located in close proximity to the few remaining kosher slaughterhouses.

Even though products may be certified as kosher at the slaughterhouse, they must still be kosher on arrival at the production kitchen. Distributors frequently load both kosher and non-kosher protein products onto the same delivery trucks, and the kosher status of a product could be compromised if a package seal is broken. Thus, at the production kitchen, the supervising rabbi inspects all deliveries carefully to verify that there are two sets of seals present: an external seal on the outside of the boxes and internal seals on the individual meat or poultry units inside the box. If a seal on an individual unit is broken, the product is refused and returned to the distributor. The rabbi also checks to verify that the deliveries carry the kosher meat plant stamp. However, as important as the kosher aspects of
the products are, it is equally impor-
tant that the reliability of the meat
supplier be verified from the
perspective of USDA inspections
and compliance with food safety and
sanitation codes.

Products need separation

According to kosher dietary
laws, meat and poultry products
have to be stored separately from
dairy products; thus at least two
distinct storage areas are required
in a kosher production kitchen.
Some kitchens resolve this issue by
designating their plants as “meat
only” plants, and allow no items
containing any type of dairy prod-
ucts into the kitchen, or by estab-
lishing two completely separate
production units, each with their
own storerooms, freezers, and
refrigerators.

The kosher status of the prod-
ucts must also be maintained
during the cooking process. Doing
so involves the choice of not only the
proper ingredients, but also the
appropriate use of equipment and
the development of appropriate
cooking schedules. The entire
cooking process must be supervised
by a rabbi, and there must be at
least one Jewish person in the
production kitchen contributing to
the cooking process.

If both meat or poultry and
dairy products are to be prepared in
the same production kitchen,
contact between the two groups of
products can be prevented by
preparing all of the meat or poultry
products first. Then after thor-
oughly cleaning all equipment and
work surfaces, the dairy products
can be processed. Separate “meat”
and “dairy” designated sets of small
equipment, such as knives or
cutting boards, can be maintained
and completely wrapped at all times
unless they are needed for a particular
production task.

Menu planning can also be done
to facilitate product preparation by
incorporating more pareve items
(neutral foods which are of neither
meat nor milk derivative) into the
menu or planning menus which
utilize ovens or other large pieces of
equipment for only one type of
product, either meat or poultry, or
milk, but not both. Having only one
type of product prepared in certain
large pieces of equipment elimi-
nates the need to kosher (or san-
tize) the equipment between the
two production cycles.

Components of the breads and
desserts used for kosher meals are
also important. If the breads and
desserts contain no dairy products,
they can be used with any meal,
contributing to a kitchen’s produc-
tion efficiency. However, because
few such breads can be purchased
on the market and pareve kosher
rolls from kosher food plants are
very expensive to purchase pre-
made, production kitchens serving
the inflight industry frequently
make their own breads and rolls.
An additional modification often
made to the bread or roll recipe is
the addition of orange juice. This
addition changes the status of the
roll or bread from that of a “bread”
to a mezonot (a “general” food or
provision, as opposed to a specific
category, such as “bread”). This
change is very important on board

_Malka and McCool_ 75

Contents © 2003 by FIU Hospitality Review.
The reproduction of any
artwork, editorial or other
material is expressly prohibited without written permission
from the publisher, excepting thatone-time educational reproduction is allowed without express permission.
an aircraft, since Jewish dietary laws require that persons engage in a specified hand washing ritual prior to eating a "bread." However, the laws require only a prayer and not the complete hand washing ritual when a person is eating bread in the mezonot status. Without this modification, Jewish persons eating kosher meals on aircraft would all have to leave their seats to perform the necessary hand washing ritual prior to consuming their meal.

**Other modifications needed**

No cooking is allowed to take place on the Sabbath under any circumstances. If the kosher production kitchen prepares frozen meals, then this production restriction is not an issue since all meals are cooked in advance, frozen, and then tempered and rethermalized for service on board aircraft, as needed. However, if the kitchen is producing fresh kosher meals, any meals for a flight scheduled to depart on the Sabbath (usually in the evening) must be completely prepared, plated, and/or packaged for boarding, packed into trolleys, properly chilled and ready for boarding two hours prior to the beginning of the Sabbath (Friday afternoon). When it is close to the time of the flight's departure on Saturday evening, the trolleys are simply pulled out of refrigeration and loaded onto the plane.

The observance of Passover involves both menu item modification and the koshering of all equipment that will be used only during the holiday. While airlines try to keep kosher menus during Passover as close to what they are during the rest of the year, certain ingredients have to be changed. Rice and pasta are not acceptable as kosher items during Passover, thus the starch component of a hot kosher meal would only be potatoes. The bread or roll portion of the meal would be replaced by matzo, the traditional unleavened bread required during Passover, according to the Jewish dietary laws.

All products prepared for use during Passover must be prepared as kosher for Passover, a higher than usual level of kosher. To achieve this kosher status, all grain and bread products have to be removed from the production kitchen, and all the cooking equipment in the entire kitchen must be cleaned and koshered according to Passover laws, all under the supervision of a rabbi. Once this cleansing and koshering has been completed, nothing that is unacceptable during Passover can be brought into the production kitchen.

When a kitchen prepares fresh kosher meals, timing the transition between the production of regular kosher meals and kosher meals for Passover can be very difficult because of the airlines' flight schedule demands. The koshering process for the production kitchen can take from one to three days; it can be partially simplified by having a complete wrapped and sealed set of koshered cooking equipment, such as sheet pans, ladles, and pots, which is reserved only for Passover use. Since the koshering of the kitchen and all the
equipment must be completed before Passover begins, the procedure generally implemented to ensure the proper preparation of the kitchen is that passengers are served kosher meals that are kosher for Passover a day or two before Passover actually begins.

A further challenge in regard to the production of kosher meals for Passover is the need for the airlines or the production kitchen to purchase a complete set of eating and serving equipment used for Passover meals only. Items such as entree casseroles, eating utensils, and even plastic trays that plates are placed on all have to be new. This new equipment has to be ordered in appropriate amounts well before the time of the Passover to be sure that it will be available for use when needed. After Passover, this equipment can be placed in general circulation or discarded, depending on whether the equipment chosen by the airline is disposable or airline customized.

**Kitchen may be selected**

An airline may require an inflight kitchen to board "airline specific" kosher meals on its flights or the airline may only require "generic" kosher meals for its flights. Generic meals can be obtained from any kosher production kitchen and contain no logo components. Airline specific meals are prepared by a specific production kitchen especially for that airline, and include trays, cups, and utensils with the airline logo. When airline specific kosher meals are required by an airline, the inflight caterers at the airports to which that airline flies encounter additional costs for long distance meal shipment and the storage of meals in sufficient quantity to avoid stock outages for the airline’s flights. Sometimes a distribution center closer to the inflight kitchens with a regular demand for these airline specific meals will be established to help alleviate the shipping and stockage difficulties.

Regardless of whether generic or airline specific meals are specified, generally the utensils packaged with the meals cannot be reused for the production of new kosher meals since there is no way to know if the utensil was used to consume a meat or a dairy product. In addition, when the soiled trays and utensils are off-loaded from the aircraft at the flight’s destination, there is no way of knowing whether the utensils were used for a kosher meal or a regular meal. Thus, unless the utensils can be koshered, new ones must be used each time a kosher meal is produced.

**Special packaging needed**

Packaging the meals is the last step performed by the production kitchen. The primary purpose of the special measures required is to provide isolation of the completed kosher meals in the presence of non-kosher meals. This isolation must be such that the integrity of the kosher meals is not compromised in the latter stages of the logistical flow where rabbinical supervision is not available.
Unless the meal is cold, it is packaged in two parts. This separation is required to prevent compromising the kosher status of the entree as a result of breaking the seal of an entire meal in order to access the entree for rethermalization on board the aircraft. All items that do not require rethermalization on board the aircraft, i.e., juice, bread, eating utensils, etc., are placed on a plastic tray, packaged, and sealed separately from the main entree. This cold portion of the meal can be packaged either in a shrink-wrap/plastic-wrap that is heat-sealed or in a transparent plastic box that is sealed with adhesive stickers. Either sealing method has to be done in such a way that any attempt to break the seal will be visible. If a seal is tampered with or broken, that meal must be discarded.

Hot entrees, whether shipped to the inflight kitchen frozen or fresh, have to be double wrapped, first with regular aluminum foil, then with a tear resistant aluminum bag. The entrees are then sealed because dietary laws say that if a meal is going to be heated in an oven that is not strictly kosher, such as the convection ovens on board aircraft, this meal has to be wrapped twice to prevent contamination. The only exception to this double wrapping process is for flights where all the meals served are kosher, and the ovens on these planes are used to rethermalize only kosher meals. In this case, the fresh entree will be served in its casserole, and the casserole will be covered with only one layer of aluminum foil, similar to the way that entrees for conventional airline meals are packaged, avoiding the extra requirements of double wrapping and sealing.

In preparation for shipping, stickers that carry the kosher production kitchen and the certifying agency names are placed on the cold item units. The entree unit stamps consist of ingredient information, the production kitchen name, certifying agency identification, and a USDA stamp. After the main entree is packaged, it will be positioned on top of the cold item unit or in an indentation in the cold items tray which is especially made for airline use. Each such unit that contains both the cold portion and the hot portion of a meal is inserted in a separate box and sealed. The sealed boxes are packed into cases, usually 12 meals per case, for shipping to inflight caterers.

Standards are set

When the packaged frozen or fresh kosher meals are received in the inflight caterer's kitchen, the individual meals have to be checked for the completeness of the seals that have been placed on them during the packaging process in the production kitchens. If any of the individual meal unit seals are broken, the meal has to be discarded or returned to the production kitchen as unacceptable. Once inspected, the cases of meals (if frozen) are stored in a separate section in the general
freezer storage area; individual frozen meal units are removed from the cases as needed, depending on passenger requests for kosher meals and the number of meals to be served on a flight. Special attention is given to the requirement for special meals that are kosher for Passover during the Passover period.

Frozen meals must be tempered under refrigeration for 24 hours prior to their being boarded onto an aircraft. This tempering is necessary in order for the entree to be properly heated during the heating time available on the aircraft and for the cold food items to be completely defrosted prior to service. Thus, no last minute requests for kosher meals can be accepted, as there is no suitable method for rapid thawing of the meal components. Use of a microwave oven for thawing is unacceptable as all seals have to remain intact, and microwaving a kosher meal can cause the plastic wrapping to tear, resulting in the integrity of that meal being compromised.

Overall, kosher meal handling in an inflight kitchen is minimal and does not require any additional assembly of items by the inflight kitchen staff since all preparation and packaging is done by the kosher production kitchen. Even fresh meals are completely prepared, packaged, and chilled prior to boarding on the aircraft in accord with the U.S. FDA Food Code standards by the kosher production kitchen.

The wrapped and sealed kosher meal entrees are loaded onto oven racks with other regular meal entrees for aircraft boarding and for the heating process. Thus it is essential that the seal on both the cold tray and the hot entree remain intact. Flight attendants take the trays to the passengers while they are still completely wrapped and sealed. Passengers break the seal and open the cold tray packages. After the cold trays are served, hot entrees are brought to passengers in the foil bags in which they were heated. Passengers, again, open the sealed bags. Throughout this service procedure, it is clear to the passengers who ordered kosher meals that the integrity of their meals was not compromised once the meal left the production kitchen, the last location where a rabbi's supervision is required and guaranteed.

Special handling needed

Once the flight reaches its destination, dirty service equipment and eating utensils that were part of the kosher meals are off-loaded from the plane and transferred to the destination inflight kitchen together with the other utensils and service equipment used for the traditional meals. Deplaned kosher equipment cannot be used for future kosher meal service as it has been exposed to non-kosher equipment and non-kosher food remains. However, if an airline uses logo eating utensils and equipment for its kosher meal service, the used kosher equipment
can still be used in the inflight kitchen for further non-kosher meal assembly and service for that airline.

There is an exception to this constant need for new eating utensils and equipment. If the quantity of eating utensils and equipment is sufficient to make the process cost effective, this equipment can be cleaned and sanitized to kosher standards and reused for future kosher meals. However, only a limited number of airlines have that quantity level and only a limited number of kitchens are capable of sanitizing the equipment to meet kosher standards. Today, because of the cost associated with utensil and equipment replacement, most of the eating utensils packed with kosher meals are plastic. Thus, they are simply discarded after the flight is completed.

Certifying adds complexity

Even though airlines may make a conscientious effort to plan and serve kosher menus that they feel will appeal to their passengers, they are still faced with another dilemma regarding their kosher meal service, which kosher approval (or certifying agency) to accept for their meals. As the complexity of the manufacturing processes for food items and the need for kosher certification has increased as demand for these products has increased, so too has the number of certifying agencies increased. This increase has led to a great deal of consumer confusion regarding which agency to rely upon so that their personal desired level of adherence to kosher standards is met by the products they consume.

Because consumers have highly varied opinions regarding the many certifying agencies, the airlines face a difficult decision in their determination of which kosher approval to select since there is a chance that not all of their passengers will be satisfied with their selection. Furthermore, there is a possibility that some of their passengers will not even consider products certified by their selected agency to be kosher. Although an airline may survey the opinions of their passengers and that of the Jewish community in the areas most frequently served by their flights, there is still no “correct” solution to this dilemma, as even passengers residing in different geographical areas within the U.S. will have differing opinions. Thus, airlines generally select the certifying agency(ies) that they feel the majority of their passengers want and which selected suppliers can provide.

Systems are varied

The logistical system required to place high quality meals on board aircraft is a complex one, even for routine meal service. When special meals are required, additional factors that must be considered add complexity to the meal service system. Kosher meals have unique, highly specific requirements if they are to maintain their kosher status.
until they are served to airline passengers. Challenges exist throughout the logistical system required for the preparation, boarding, and serving of inflight meals. These challenges begin with the food sources where there are limitations on the meat/poultry supply, for example, and end with issues concerned with the service of the kosher meals on the aircraft. Thus, a variety of modifications to the traditional system, such as kashering for Passover, separating equipment used for meat/poultry and dairy cooking, and sealing the meals to prevent contamination from non-kosher foods, have to be implemented throughout the logistical system in order to provide solutions to these challenges.

In addition, these modifications have to be reinforced by precautionary measures, such as production and service guidelines and product handling instructions, in order to guarantee that the kosher meals will keep their kosher status, especially during the portions of the logistical support system where there is no immediate rabbinical supervision present (i.e., in the inflight kitchen and on the aircraft). However, these modifications, as important as they may be, are always secondary to the essential food safety and sanitation codes which guarantee the food, whether traditional or kosher, as fit for human consumption.

While logistical system modifications are necessary to successfully service kosher meals on board aircraft, there is no one set of modifications that applies to all operations of the same type - whether the operation is a production kitchen, inflight kitchen, or an airline. Variations in effective system modifications might result from variances in factors such as the size of the production kitchen and the volume of meals produced by the kitchen, the size of the market for kosher meals at a particular airport facility, differing flight origins and destinations (domestic or international), or specific airline specifications. No matter what approach is taken with regard to system modifications, to be successful all operations throughout the logistical system have to follow the essential, complex Jewish dietary laws and the food sanitation and safety codes of the FDA, which include the development and implementation of an effective HACCP system. Thus the ability of inflight caterers to provide the airlines with kosher meals which can maintain their kosher status until they are served to the airline passengers represents a significant logistical achievement for both caterers and airlines.

References


McCool.

Jones and Kipps.

McCool.


Ibid.


McCool.


Note: The following persons were interviewed: Inflight kitchens, David Smith, personal interview, May 23, 2001; Dale Reighter, personal interview, June 5, 2001; Saville Levy, personal interview, July 12, 2001; John Birckhead, e-mail interview, August 2, 2001; Kosher meal production kitchens, Rabbi Weiner, personal interview, June 3, 2001; Samuel Weiss, personal interview, August 6, 2001; Airlines, Siegfried Lang, phone interview, July 17, 2001; Andrea Pratt, phone interview, August 3, 2001; Hannelore Perez, e-mail interview, August 13, 2001. Airline flight attendants, Maria Colafella, personal interview, June 14, 2001. Kosher certifying agencies, Rabbi Leonard Steinberg, phone interview, July 17, 2001.

Orit Malka is overnight manager at Harborside Hyatt Conference Center and Hotel, Boston, Massachusetts, and Audrey C. McCool is professor and assistant dean for research in the William F. Harrah College of Hotel Administration, University of Nevada-Las Vegas.
Hospitality education: Prevalent perceptions

by Matt A. Casado

The composition of hospitality curricula has been debated by educators, alumni, and industry professionals for the last 30 years. Some higher education programs have emphasized the teaching of professional courses, while others have focused primarily on management. This study recalls highlights of curriculum research conducted since the late 1970s and provides current perceptions of alumni, lodging, and restaurant professionals on core, support, and advisor-approved electives.

Studies of higher education as preparation for business careers have been conducted over the years. A case in point is the 1959 study by Robert A. Gordon and James E. Howell, sponsored by the Ford Foundation, whose results were a sharp indictment of the general state of business education in the United States. The report criticized the conventional subjects offered in the nation’s collegiate business schools.

Higher education for the hospitality industry is a discipline that has made considerable advances in the last 30 years in both curriculum quality and number of undergraduate programs. Among the institutions offering hospitality degrees, a wide variation is found in the courses taught. Some programs emphasize professional courses, which can range from basic Housekeeping Management and Commercial Food Preparation to specialized electives such as Yield Management in Lodging Operations and Chemistry of Foods.

Lately, the widespread use of technology has compelled hospitality schools to modify their curricula to adopt pedagogical methods based on computers as indispensable tools. In most cases, hospitality programs have attempted to adjust their courses over the years to fit the needs of their students as well as those of the industry. Consequently, there is an ongoing need to identify the critical competencies that lodging
and restaurant professionals are seeking when hiring hospitality school graduates.

The purpose of this study is to investigate and compare the perceptions of lodging and restaurant professionals and alumni toward core, required support, and advisor-approved elective courses commonly taught by hotel and restaurant management programs offering baccalaureate degrees in order to bring hospitality curricula in line with current needs of the industry.

Research dates to ’70s
As the hospitality industry began to develop during the decade of the 1970s, demands for educators to do a better job of preparing students for their hospitality careers started to be heard. In an address before the annual convention of the Council of Hotel, Restaurant, and Institutional Education (CHRIE) in Las Vegas, Nevada, on August 9, 1977, Howard Varner, president of Host International, asked hospitality schools to prepare students to become good, committed businessmen who could operate establishments profitably and advocated for more practicums in industry establishments. At the same time, he recommended that graduates possess knowledge of the profession, as the industry shouldn’t spend precious time teaching them the basics of the business. As early as the 1970s he was asking hospitality programs to provide technical education, together with managerial and business courses and industry internships in their curricula.

In an article published in February 1980, Professor Thomas Powers clarified Varner’s curriculum advocacy stating that while technical management skills were an important component of baccalaureate degree programs, these specific competencies might result in “vocationalized” curricula, adding that educational programs must reflect current changes in the nature of general management as the industry itself could teach the technical aspects of the profession more quickly and effectively than the university. Powers advocated for the 1980s institutions of higher learning to adopt a shift from vocationally-oriented education to the development of human and conceptual management skills of students.

Education loses relevancy
During the early 1980s, several papers were published suggesting that business education in colleges and universities was losing pragmatic application and real world relevancy. The articles expressed concerns that communication between academia and industry had not been keeping pace with the changing conditions in the real world environment, indicating that the two sectors might be moving in opposite directions.

In 1984, Professor David Pavesic stated that at the time there was danger of schools ill preparing the next generation of business leaders. He added that educators must seek input from
industry practitioners and graduates from hospitality programs before matching curricula with their needs. “After heeding the counsel of their customers,” he added, “curriculum review and design must be regularly and thoroughly conducted by hospitality programs.”

He conducted a study to determine the perceptions of hospitality educators, recent graduates, and industry practitioners toward the importance of course subject areas common in hospitality curricula. The results showed the following five courses ranked highest by industry professionals: Supervision and Human Relations, F & B and Labor Cost Control, Internship Work Experience, Financial Analysis, and Training and Coaching Techniques. The alumni made this selection: Internship Work Experience, Financial Analysis, F & B and Labor Cost Control, Supervision and Human Relations, and Computer Applications. The importance given by the two groups to the courses commonly taught was nearly similar.

In a 1988 article, Patrick Moreo and David Christianson emphasized that the American curriculum was based on an emphasis on management over technical skills development. This, the authors stated, contrasted with the European programs at the time, which integrated a great deal of technical, task, and skill-oriented material into their curricula, especially in the food and beverage area.

As previously recommended by Varner in 1977, practical experience (hours worked in the industry) and internships were being widely required by most programs. For example, at UNLV students were placed in local establishments in observational practicums, working about 15 hours per week combined with weekly seminars. At Cornell, co-op, monitored internships were in place with students working at properties for a semester or longer.

**Ideal courses cited**

By the end of the decade of the 1980s, leaders of hospitality programs defined the ideal curricula. Deans Joseph Cioch, University of Houston, James Dawney, University of New Haven, and Peter Van Kleek, Northern Arizona University, outlined the characteristics that should be found in hospitality graduates: Technical Skills (professional courses), Analytical Skills (business courses), Interpersonal Skills (liberal arts courses), and Management Skills (management courses).

Casado conducted a study in which nationwide recruiters showed preference for curricula composed of one-third liberal studies, one-third general business, and one-third professional courses rather than for those offering a substantial number of courses in any of the three components and a modest scattering in the remaining two. It is interesting to note that this even distribution of knowledge had been already
advocated by Varner in 1977 and by Powers in the early 1980s.

By the early 1990s, the core requirements for hospitality programs suggested by Varner and Powers 10 years previously had been established. In another study conducted by Casado, the ranking given by recruiters to the first five courses considered as most important were F & B Labor Cost Control, Principles of Management, Hospitality Human Resources Management, Industry Internships, and Hospitality Accounting.

Study investigates perceptions

The sample curriculum adopted in this study is that of the School of Hotel and Restaurant Management (SHRM) at Northern Arizona University (NAU), Flagstaff. NAU's SHRM is a free-standing school teaching undergraduate courses to more than 600 majors per semester. The professional or core courses must be taken and passed by all students in order to graduate from the program. The required support courses are not taught in the school; students must take economics, finance, and accounting in the university's School of Business and two semesters of a foreign language in the Modern Language Department. The advisor-approved electives are hospitality courses taught in the SHRM that are not included in the core component of the curriculum.

The study was designed to reach 500 subjects as follows: 250 NAU alumni, 25 recruiters, and human resource directors of 125 lodging companies and 100 restaurant companies nationwide. While the lodging group managed both rooms and F & B outlets, the restaurant group consisted only of restaurant, institutional, and catering operations.

Addresses of alumni who had graduated from the school in the last five years were obtained from NAU's alumni office. The university's career office provided addresses of recruiters. Addresses of lodging companies were taken from the current edition of the Hotel Index and those of restaurants from the Directory of Chain Restaurant Operations. The sample included at least two companies from each state. In total, 353 pieces were sent by mail, and 147 interactive questionnaires were sent to alumni and companies whose e-mail addresses were known. The breakdown of the mailout was 252 questionnaires sent to alumni, 142 to lodging companies, and 106 to restaurant companies.

The instrument consisted of a questionnaire with Semantic Differential (SD) scales. Each scale item had a length of seven points with contrasting adjectives at each end. Values ranged from one for "very important" to seven for "quite unimportant"; four was considered to be "neutral."

The SD is intended to measure people's reactions to stimulus words in terms of rating on bipolar scales and has been
used extensively as a measure of attitudes in a wide variety of studies. Evidence of the validity of evaluation factor scores has been demonstrated by correlation with other scales measuring respondents' perceptions. Several test-retest reliabilities of SD ratings have been determined, correlation for different constructs having reached acceptable ranges.

Following the return of the valid questionnaires, data were entered into the SPSS program and processed to obtain frequencies within the three groups of respondents, showing mean scores and standard deviations.

Results are shown

Table 1 shows the number of valid responses received by group. A substantial number of letters and interactive questionnaires were returned because of unknown addressees. Of the 353 questionnaires sent by mail and the 147 by e-mail, 141 and 68 were received, respectively, with an overall total of 209.

The percentage of lodging professional respondents represented 15 human resource managers, 14 human resource directors, 10 managers of recruiting, 9 directors of recruiting, 8 vice-presidents of human resources, 6 corporate resource managers, 6 vice-presidents of operations, 5 corporate directors of talent acquisition, 1 operational effectiveness manager, and 1 vice-president of diversity. Titles of restaurant professionals were 14 directors of human resource, 6 vice-presidents of human resource, 5 college recruiters, 4 human resource managers, 4 managers of recruiting, 3 directors of recruiting, 3 vice-presidents of operations, 2 corporate owners, and 1 corporate staffing manager. Of the 92 questionnaires returned by alumni, 58 were from graduates working in the hospitality field (63 percent) and 34 from graduates working for other industries (37 percent).

Table 2 shows the rankings by mean of professional courses by the three groups.

Courses are listed

Judging from the responses, the five most important courses perceived by alumni were Hospi-

<table>
<thead>
<tr>
<th>Group</th>
<th>By mail</th>
<th>By e-mail</th>
<th>Total received</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alumni</td>
<td>54</td>
<td>38</td>
<td>92</td>
<td>44</td>
</tr>
<tr>
<td>Lodging</td>
<td>53</td>
<td>22</td>
<td>75</td>
<td>36</td>
</tr>
<tr>
<td>Restaurants</td>
<td>54</td>
<td>8</td>
<td>42</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>141</td>
<td>68</td>
<td>209</td>
<td>100</td>
</tr>
</tbody>
</table>

Casado
Table 2
Mean ranking of 17 professional courses by group

<table>
<thead>
<tr>
<th>Course</th>
<th>Alumni</th>
<th>Lodging</th>
<th>Restaurant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Hospitality Leadership</td>
<td>1.84</td>
<td>1.68</td>
<td>1.90</td>
</tr>
<tr>
<td>2. Food &amp; Beverage Controls</td>
<td>2.22</td>
<td>2.03</td>
<td>1.71</td>
</tr>
<tr>
<td>3. Hospitality Managerial Accounting</td>
<td>2.24</td>
<td>1.99</td>
<td>2.33</td>
</tr>
<tr>
<td>4. Food Service Management</td>
<td>2.36</td>
<td>2.07</td>
<td>1.67</td>
</tr>
<tr>
<td>5. Hospitality Human Resources Mngt.</td>
<td>2.39</td>
<td>1.56</td>
<td>1.86</td>
</tr>
<tr>
<td>6. Hospitality Law</td>
<td>2.42</td>
<td>2.00</td>
<td>2.10</td>
</tr>
<tr>
<td>7. Senior Seminar</td>
<td>2.54</td>
<td>2.55</td>
<td>3.14</td>
</tr>
<tr>
<td>8. Hospitality Information Technology I</td>
<td>2.54</td>
<td>2.65</td>
<td>3.10</td>
</tr>
<tr>
<td>9. Hospitality Marketing</td>
<td>2.73</td>
<td>2.08</td>
<td>2.90</td>
</tr>
<tr>
<td>10. Commercial Food Preparation</td>
<td>2.75</td>
<td>3.01</td>
<td>2.62</td>
</tr>
<tr>
<td>11. Hospitality Sales Management</td>
<td>2.75</td>
<td>2.00</td>
<td>3.43</td>
</tr>
<tr>
<td>12. Hospitality Information Technology I</td>
<td>2.79</td>
<td>2.65</td>
<td>3.00</td>
</tr>
<tr>
<td>13. Guest Service (Front Office) Mngt.</td>
<td>2.96</td>
<td>1.75</td>
<td>3.19</td>
</tr>
<tr>
<td>14. Dining Service Management</td>
<td>2.96</td>
<td>2.48</td>
<td>1.90</td>
</tr>
<tr>
<td>15. Housekeeping/Engineering Mngt.</td>
<td>3.03</td>
<td>1.99</td>
<td>3.48</td>
</tr>
<tr>
<td>16. Introduction to the Hospitality Industry</td>
<td>3.22</td>
<td>2.52</td>
<td>2.71</td>
</tr>
<tr>
<td>17. International Hospitality Operations</td>
<td>3.88</td>
<td>3.56</td>
<td>4.14</td>
</tr>
</tbody>
</table>

tality Leadership, Food & Beverage Cost Controls, Hospitality Managerial Accounting, Food Service Management, and Hospitality Human Resources Management. The five least important courses were International Hospitality Operations, Introduction to the Hospitality Industry, Housekeeping/Engineering Management, Dining Service Management, and Guest Service (Front Office) Management.

The five most important courses perceived by lodging professionals were Hospitality Human Resources Management, Hospitality Leadership, Guest Service (Front Office) Management, Hospitality Managerial Accounting, and Housekeeping/Engineering Management. The five least important courses were International Hospitality Operations, Commercial Food Preparation, Hospitality Information Technology I, Senior Seminar, and Introduction to the Hospitality Industry.

The restaurant professionals perceived as most important Food Service Management, Food and Beverage Cost Controls, Hospitality Human Resources Management, Dining Service Management, and Hospitality Leadership. The five least important courses were...

The three groups agreed on Hospitality Leadership and Hospitality Human Resource Management as being most important and International Hospitality Operations as being least important.

Table 3 shows the ranking by mean of required support courses by the three groups.

Judging from the responses, the three most important required support courses in the perception of alumni were Industry Work Experience, Conversational Hospitality Spanish, and Financial Accounting. The three least important courses were Macroeconomics, Microeconomics, and Second Semester of a Modern Language.

The three most important required support courses in the perception of lodging professionals were Industry Work Experience, Conversational Hospitality Spanish, and Financial Accounting. The three least important courses were Microeconomics, Macroeconomics, and Second Semester Modern Language.

The restaurant professionals perceived Industry Work Experience, Conversational Hospitality Spanish, and Financial Accounting as most important. The three least important courses were Macroeconomics, Microeconomics, and Second Semester Modern Language.

All three groups viewed Industry Work Experience, Conversational Hospitality Spanish, and Financial Accounting as most important. The groups' consensus of the least important courses were Macroeconomics, Microeconomics, and Second Semester Modern Language.

The three most important advisor-approved elective courses in the perception of alumni were Employee Training & Evaluation, Industry Internship, and Corporate Training.

<table>
<thead>
<tr>
<th>Table 3</th>
<th>Mean ranking of eight required support courses by group</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alumni</strong></td>
<td><strong>Lodging</strong></td>
</tr>
<tr>
<td>1. Industry Work Experience</td>
<td>1.54</td>
</tr>
<tr>
<td>2. Conversational Hospitality Spanish</td>
<td>2.40</td>
</tr>
<tr>
<td>3. Financial Accounting</td>
<td>2.54</td>
</tr>
<tr>
<td>4. Finance</td>
<td>2.89</td>
</tr>
<tr>
<td>5. First Semester Modern Language</td>
<td>3.14</td>
</tr>
<tr>
<td>6. Second Semester Modern Language</td>
<td>3.34</td>
</tr>
<tr>
<td>7. Microeconomics</td>
<td>3.79</td>
</tr>
<tr>
<td>8. Macroeconomics</td>
<td>3.86</td>
</tr>
</tbody>
</table>
Table 4
Mean ranking of nine advisor-approved electives by group

<table>
<thead>
<tr>
<th>Alumni</th>
<th>Lodging</th>
<th>Restaurant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Employee Training &amp; Evaluation</td>
<td>1.92</td>
<td>1.36</td>
</tr>
<tr>
<td>2. Industry Internship</td>
<td>2.04</td>
<td>1.40</td>
</tr>
<tr>
<td>3. Corporate Finance for Hosp. Managers</td>
<td>2.63</td>
<td>2.44</td>
</tr>
<tr>
<td>4. Advanced F &amp; B Management</td>
<td>2.80</td>
<td>2.92</td>
</tr>
<tr>
<td>5. Resort Management</td>
<td>3.15</td>
<td>3.00</td>
</tr>
<tr>
<td>6. Hospitality Litigation</td>
<td>3.29</td>
<td>3.12</td>
</tr>
<tr>
<td>7. Beverage and Bar Operations</td>
<td>3.33</td>
<td>3.00</td>
</tr>
<tr>
<td>8. Club Management</td>
<td>3.60</td>
<td>3.20</td>
</tr>
<tr>
<td>9. Gaming and Casino Management</td>
<td>3.84</td>
<td>3.75</td>
</tr>
</tbody>
</table>

Finance. The three least important courses were Gaming and Casino Management, Club Management, and Beverage and Bar Operations.

The three most important advisor-approved elective courses in the perception of lodging professionals were Employee Training & Evaluation, Industry Internship, and Corporate Finance. The three least important courses were Gaming and Casino Management, Club Management, and Hospitality Litigation.

The restaurant professionals perceived as the most important advisor-approved elective courses Employee Training and Evaluation, Industry Internship, and Advanced F & B Management. The three least important were Gaming and Casino Management, Club Management, and Resort Management.

The three groups chose as most important Employee Training & Evaluation, and Industry Internship. Alumni and lodging professionals both chose Corporate Finance, while restaurant professionals indicated that Advanced Food & Beverage Management was the third most important course. All groups coincided on selecting Gaming and Casino Management and Club Management as least important. Alumni considered Beverage and Bar Operations as the third least important course; lodging professionals selected Hospitality Litigation, and restaurant professionals chose Resort Management.

Changes are identified

One limitation of this study is that perceptions of respondents could have been subject to individual or group biases. Thus, responses of the alumni surveyed could have been based on specific experiences of each individual respondent. For instance, the effectiveness of the instructor who taught the course, the rigor demanded by the instructor, and
the use of the course content in the graduate's present job. For example, a front office course would have limited value to a graduate working in a restaurant. Conversely, a food management course would seem a waste of time to a graduate working in the rooms division of a lodging property. The success (or lack of success) of graduates in the workplace could also have been a determinant factor. If a graduate was not been promoted for whatever reason, she/he might put the blame on the quality of the courses taken.

The responses of lodging and restaurant executives could again have been construed on biased individual perceptions. Although as professionals they should have been quite familiar with the content of the courses, directors of F & B may have been inclined to rate courses with F & B management content higher. Conversely, lodging professionals may have been biased toward courses of intrinsic lodging nature.

However, the population of this study, industry professionals and alumni, constitutes the only appropriate forum whose opinions are pertinent to render the final judgment on hospitality curricular issues.

Looking retrospectively at the years of curriculum research in "modern" hospitality education, the perceptions of industry practitioners and alumni have changed somewhat, but not a whole lot. The managerial and business background advocated by Howard Varner in 1977, together with industry internships, still is perceived as most important. Power's suggestions that hospitality education should not become vocationalized but follow the same principles of business schools continue to be demanded by alumni and professionals. Most of Pavesic's findings in 1984 are still followed, and so are Casado's.

Respondents agree

Overall, respondents seem to agree on a curriculum that combines management, business, and operation concepts, a pattern already advocated by Powers in the 1980s. However, a few new perceptions have emerged. The concept of leadership as a core course appears to be most important. A required course in international operations doesn't seem to be needed by industry or alumni, due perhaps to the fact that graduates from American hospitality schools are recruited by companies to work in domestic establishments. In addition, a required course in conversational Spanish for hospitality managers was perceived as very important by the three groups. This could be the result of important demographic trends resulting from massive immigration from Latin America.

As in the past, criticism is still common in colleges and universities about hospitality courses seeming to be vocational in nature. The critics often ignore that these operations courses are just but a
component of the baccalaureate hospitality curriculum and that, essentially, this curriculum needs to be tailored to fit the needs of the industry itself. The results of this study suggest that the preferred course area concentration by industry professionals and by alumni should be a well balanced combination of management, business, and professional courses, with a marked emphasis on employee supervision and quantitative and communication skills.

References

5. Ibid., 14-23.

Matt Casado is a professor in the School of Hotel and Restaurant Management at Northern Arizona University.
Campus recruitment: Four-year program profile

by Thomas Jones, Alfred W. Izzolo, and Lesley Johnson

A hospitality recruiter profile survey is replicated 18 years after the initial study and nine years from the last study to determine if recruiters and their opinions have significantly changed and what impact these changes may have on college students and the interviewing process.

It has been almost a decade since the second, and 18 years since the first study that identified the traits and attitudes of recruiters at a four-year hospitality program. The second study in 1991-92 reflected a period of tremendous economic instability in the hospitality industry. The hotel industry was just beginning to recover from a $15 billion loss in 1990, the greatest financial downturn in the history of the industry.

It was decided in the spring of 2001 to once again replicate this study in order to determine if any significant changes had occurred in recruiters or the recruiting process in the years since the last study that would impact today's hospitality graduates. The study was conducted prior to the tragedy of September 11, 2001, but the industry was lagging prior to this tragedy. The hotel industry experienced the effect of the country's economic slowdown in the first quarter of 1991; however, industry pundits were predicting a modest rebound in 2002. Today, some experts believe that the devastating impact of the World Trade Center has only served to deepen and prolong the industry recession that had already begun.

This article presents the results of this third study and will compare these findings to the findings of the initial study conducted in 1983 and the 1992 study.

The survey instrument used in the current study was almost identical to the instrument used in 1992. A number of questions added to the 1992 study examined the impact of the 1990 recession on hiring practices. These were retained because of the specter of...
an upcoming economic recession, but were slightly reworded to reflect an impending, rather than a current recession.

Sample not unbiased
In this study, as in the prior two studies, those surveyed do not represent an unbiased sampling of hospitality recruiters. Thus, no inference from this study should be made to the population of all hospitality recruiters. However, many of the companies are national in scope and recruit at dozens of other programs. Therefore, the results of this study should be of interest to hospitality schools throughout the country.

The questionnaires were distributed to 65 companies attending the Spring Career Fair at the University of Nevada-Las Vegas. Recruiters were asked to complete the survey by the end of the day-long affair when they were collected; 51 companies did so for a response rate of 78 percent. There were no traits (e.g., age, gender, race, or company type) shared by non-respondents, so a separate survey of non-respondents was deemed not necessary.

The number of companies involved in the survey and the response rate significantly differed from the 1991-92 survey when 43 out of 44 companies returned the questionnaire, a response rate of 97.7 percent. It should also be noted that the 1992 survey spanned two semesters and the current study was conducted only during the spring 2001 semester. In 1983, there were 62 companies on the campus during the time of the survey (spring 1983); 39 of those firms (65 percent) responded. The significant upturn (48 percent) in firms recruiting on campus in 2001 versus nine years ago was testimony to the corresponding recovery of business.

Profile continues to change
In 1983, the typical recruiter was male (87 percent); in 1992, 67 percent were male, but in 2001 63.8 percent were female. In 1983 77 percent were under 40; in 1992 a whopping 95 percent were under 40, but in 2001 that number fell to 80.9 percent.

The rise of women in the recruiter ranks could be indicative of increasing gender parity in a formerly male-dominated industry. The reversal of recruiter age reflects a progressively aging work populace as more of the baby boomer generation begins to hit middle age.

Another continuing, albeit disturbing, trend was the shrinking level of educational attainment among recruiters. In 1983, 94 percent of the recruiters had at least one college degree. In 1992, that number dropped to 88 percent. In the 2001 survey, that number slipped slightly to 85 percent. Interestingly, only 35 percent indicated the possession of a business degree and only 15 percent had a hospitality degree. Other degrees were widely dispersed and included broadcasting, law, journalism,
liberal arts, education, music, psychology, and sociology. The number of people representing operations had also decreased to near the levels of 1983 (86 percent).

The typical recruiter continued to be college educated, but the degree background had shifted somewhat over the decade, as Table 1 indicates.

Clearly, hospitality degrees continued to decrease in number and the “other” category proceeded to gain ground.

**Hiring increases**

It was reported in 1992 that there had been erosion in the recruiters’ authority to hire applicants. This survey found a reversal of this trend. In 1983, 80 percent of recruiters could make offers to the candidates. In 1992, that number dipped to 70 percent, but in 2001 it bounced back to 79.2 percent. Perhaps the vast improvement in the business climate at the time of the study had liberalized hiring policies. Clearly, the typical recruiter’s power and influence

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Backgrounds of recruiters</th>
</tr>
</thead>
<tbody>
<tr>
<td>1983 college major</td>
<td># Reporting</td>
</tr>
<tr>
<td>Hospitality Administration</td>
<td>12</td>
</tr>
<tr>
<td>Business Administration</td>
<td>10</td>
</tr>
<tr>
<td>Other</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>42</td>
</tr>
</tbody>
</table>

| 1991-92 college major | # Reporting | Percentage |
| Hospitality Administration | 09 | 23.8 |
| Business Administration | 14 | 36.8 |
| Other | 10 | 26.3 |
| No Response | 05 | 13.1 |
| Total | 38 | 100.0 |

| 2001 college major | # Reporting | Percentage |
| Hospitality Administration | 07 | 13.7 |
| Business Administration | 15 | 29.4 |
| Other | 26 | 51.0 |
| No Response | 03 | 05.9 |
| Total | 51 | 100.0 |

*Jones, Izzoio, and Johnson*
with candidates seemed to be on the increase.

Recruiting experience ranged from one to 18 years, with a mean of 5.4 years. This was an increase of 1.4 years over the 1992 study. The average length of tenure with the current employer declined from 6.5 years in the 1992 study to 4.85 years in 2001. Recruiter ranks continued to be populated with many seasoned professionals.

At UNLV, lodging corporations represented a plurality (33.3 percent) of all hospitality recruiters, with commercial food service firms in third place (27.1 percent). For the first time, the “other” category comprised the largest category (35.4 percent). Institutional food service and quick food service tied for last place, with each garnering 2.1 percent of the total. In the “other” category, casinos dominated, with airlines, health clubs, the public sector (U.S. Army), and private clubs all being represented. In 1992, hotel recruiters were in the majority with 53.5 percent of the total. One potential explanation for the shift in recruiter representation was the college’s recent expansion of majors and degree programs at the undergraduate and graduate levels.

Recruiters rank attributes

In 1983 respondents were asked to rank-order the students’ qualifications. They were, in descending order: verbal communication, work experience, personal appearance, and grade point average. In the 1992 survey, the original qualifications were maintained and two other options were added, extracurricular involvement, and prepared and enthusiastic about the firm. A ranking of “1” constituted the most important qualification and the category of “other” was offered as an optional category but was not included in the ranking. The 2001 study used the same qualifications as the 1992 survey (See Table 2).

Seven respondents chose to add

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal appearance</td>
<td>3 (2.36)</td>
<td>3 (3.49)</td>
<td>4 (3.31)</td>
</tr>
<tr>
<td>Work experience</td>
<td>2 (2.30)</td>
<td>1 (1.98)</td>
<td>1 (2.17)</td>
</tr>
<tr>
<td>Grade point average</td>
<td>4 (3.65)</td>
<td>4 (4.70)</td>
<td>5 (5.21)</td>
</tr>
<tr>
<td>Verbal communication</td>
<td>1 (1.70)</td>
<td>2 (2.17)</td>
<td>2 (2.31)</td>
</tr>
<tr>
<td>Prepared and enthusiastic about the company</td>
<td>3 (3.49)</td>
<td>3 (2.79)</td>
<td></td>
</tr>
<tr>
<td>Extracurricular involvement</td>
<td>5 (4.95)</td>
<td>6 (5.24)</td>
<td></td>
</tr>
</tbody>
</table>
responses in the optional "other" category provided in the 2001 survey. Responses in the "other" category included "attitude, flexibility, guest service skills, natural talent, positive attitude, qualification for the job, and supervisory experience."

These findings reinforced the results of the 1992 study. Work experience was still recognized as the most valuable student attribute, followed by verbal communication skills, while student grade point average, student involvement in clubs and other extracurricular activities were not perceived as being extremely relevant to the job by the recruiters.

Recruiters were also asked in a related open-ended question the one thing they most remembered about a candidate; 23 percent selected the candidate's communicative ability and 23 percent mentioned the candidate's personality. Personal enthusiasm and preparedness accounted for 21 percent of the responses, while others included such areas as the candidate's home and the level of professionalism shown during the interview by the candidate.

Another aspect of student preparation that appeared to be helpful was the ability to communicate in a foreign language, particularly Spanish; more than 85 percent of recruiters indicated that fluency in a foreign language would be helpful to the candidate, an increase of 4 percent over the 1992 study. Furthermore, 87.5 percent chose Spanish as the most beneficial, a drop of 5.5 percent from the 1992 study. However, the message was still clear; Spanish fluency remained highly valued by the hospitality industry.

In the 1992 study, 23 percent of those responding indicated they would give preference to a candidate with a master's degree; that number fell to 13 percent in 2001. A disheartening trend, it seemed that hospitality educators had been unable to convince companies and their recruiters of the value of retaining those who possess a master's degree. The postulation made in the 1992 study that recruiters were only concerned with a candidate's immediate contribution to the firm appeared to continue.

Corporate package changes

A majority of companies continued to give students a preview through internship programs; 62 percent of respondents indicated that their firms sponsor an internship program, a 10 percent increase from 1992.

The number of graduates who will find themselves in a management training program declined from 79 percent in 1992 to 55 percent in 2001. The growth of direct placement was undoubtedly a reflection of the industry's focus on productivity. It should be noted that the lodging sector (e.g., hotels, resorts, and casinos) favored direct placement, but restaurant chains leaned more toward the management training approach. The
average management training program has remained at 22 weeks over the past nine years, but the range has increased dramatically. Some programs last less than a week, while others range to 15 months.

Today's hire can expect an average starting salary of $29,858.54. The range in 2001 was from $22,000 to $40,000. On the surface this represented a marked contrast to an average starting salary of $21,988.10 in 1992 and an even greater contrast to 1983 when 69 percent of the recruiters reported beginning salaries of less than $16,000, with not one offering more than $18,000.

However, when inflation was factored into the salary equation based on the Bureau of Labor Statistics' Consumer Price Index Inflation Calculator, the average starting salary in 2001 was roughly equivalent to $23,654.10 in 1992 and $16,792.20 in 1982-84 dollars. It should be noted that these were real, albeit modest, gains. If this trend continues, perhaps the industry can attract better and brighter applicants who are drawn to industries that offer greater economic potential.

The prospect of an economic downturn was on the horizon in the spring of 2001, although few could even fathom the tragedy of the World Trade Center disaster. However, most firms were not ready to change their hiring practices. Only 11.4 percent indicated they were hiring fewer management trainees than the prior year. Of those who indicated they intended to curtail hiring, most refused to provide either a number or a percentage. One company estimated it would be cutting back by 10 percent; another indicated 50 percent and a third was cutting back by 25 new hires.

In 2002, there were 29 fewer (40 percent) hospitality recruiters visiting UNLV than in 2001; 16 of these recruiters were not actively recruiting. Thankfully, the economy had started to rebound and many sectors of the hospitality industry were predicting stabilization in 2002 and 2003. This should also bring about a corresponding increase in job growth in the years ahead. The average number of campus visitations reported in 2001 was 11.7, with firms reporting a broad range of one to 100.

**Much remains the same**

The 2001 survey was witness to a number of significant changes from the 1991-92 survey. Perhaps the greatest change in the profile of the recruiter was the fact that women finally appeared to have achieved parity in this arena. Recruiters seemed to be more seasoned (certainly older) and were wielding more influence in the hiring decision. Unfortunately, the educational level declined, which will undoubtedly make it even harder to convince this group of the value of hiring candidates who have demonstrated a mastery of...
valuable skills as indicated by graduate degrees and high grade point averages.

Student preparation needs for the interview were also remarkably similar to the prior studies. The need for students to have demonstrable interpersonal skills was readily apparent. The ability to communicate, show enthusiasm and energy, know something about the company, and present a professional appearance was as important in 2001 as it was in 1992 and 1983.

The growth in starting salaries in real dollars was one of the most positive trends noted in the study. Not only will this trend have an impact on the newly hired, but also it should enhance future earning as careers progress. Student candidates should be cautioned, however, that they are going to be expected to "hit the ground running" in this new era.

Formal training programs continued to shrink. New hires can no longer anticipate the prospect of extensive probation programs and a wait and see attitude on the part of their employers. They can expect to be constantly measured against the results they achieve. The world of work has not gotten any easier in the 21st century.

References


Thomas Jones is an associate professor, Alfred W. Izzolo is an assistant professor, and Lesley Johnson is an assistant professor in the William F. Harrah College of Hotel Administration at the University of Nevada-Las Vegas.
BOOK REVIEW

Tourism in China:
Exotic land revealed

by Joan Remington

There is no better way to learn about tourism in China than from renowned experts in the field. Alan Lew, Ph.D. and professor at Northern Arizona University, Lawrence Yu, Ph.D. and associate professor in the Department of Tourism and Hospitality Management at George Washington University, John Ap, Ph.D. and associate professor in tourism management at Hong Kong Polytechnic University, and Zhang Guangrui, director of the Tourism Research Centre, Chinese Academy of Social Sciences in Beijing, China, have contributed to and edited a collection of writings detailing the development of tourism in this fascinating and exotic land.

In Tourism in China the authors take the reader through five major sections detailing the modern historical developments of tourism from 1860 through 1900 to the initial beginnings of modern-day tourism development in 1978, when a shift in national policy took place emphasizing economic reconstruction rather than political struggle. Section I concludes with an analysis of inevitable tensions caused by the clash of modern and traditional values illustrated in the development of Beijing as a modern city and tourist attraction.

Section II, Research and Impacts, provides empirical studies of the impacts of tourism on China beginning with the institutions responsible for research and moving through the economic impact and the force of ecotourism in China's nature reserves. China's "adequately established hotel industry," negative news reports on travel agencies, air, land, and water tourist transportation, and theme park development, with the pros of its spectacular growth to 2,500 parks in 18 short years, and cons covering industry turmoil and many project failures, are given in Section III.

Section IV, Tourism Markets, is interesting in its approach to inbound tourism and the focus of economic development with the lifting of the "Bamboo Curtain" in 1978 after China's decades of isolation from the world. With its initial
begins in visits to family and friends by returning Chinese compatriots through suggested major market promotions, the need for improvement of the infrastructure to meet growing international tourist needs and demands, the reader continues his or her journey considering short and long-haul international tourists and leisure in China.

The section concludes with a look at outbound travel by Mainland Chinese to Hong Kong, and its implications. While internal and external restrictions on outbound travel and adequate income prevent the majority of China’s 1.2 billion population from experiencing the outside world, the World Tourism Organization in 1997 projected that China would be the fourth largest outbound tourist-generating country in the world by 2020.

Having shown the reader how China’s tourism “has experienced great changes in the last two decades” including the impact its membership in WTO provides, the editors take us through the conclusion of World Trade and China’s Tourism: Opportunities, Challenges, and Strategies, showing the reader China’s tremendous potential to “quickly solidify its presence in the international marketplace.”

This is an interesting and fascinating text, giving insight into the workings and development of what may prove to be a tremendous force in the tourism arena during the coming decades. Tourism in China can be the primary text in a specialized course on the impact of China in the world tourism marketplace, or as a supplemental text with its specialized readings in broader-based tourism course work.

In any case, it is worth the time to read and learn about a large part of the world that had been closed to many travelers for so long a time.

Joan Remington is Associate Dean and the director of the Institute of Hospitality and Tourism Education and Research in the School of Hospitality and Tourism Management at Florida International University in Miami.
Join the School of Hospitality and Tourism Management at Florida International University and Southern Wine & Spirits of Florida for three full days of spectacular wine and food events.

Benefit the FIU School of Hospitality Management's Teaching Restaurant and the Southern Wine & Spirits Beverage Management Center at FIU.

Wine Spectator Wine Seminars • Celebrity Chef Golf Tournament • Trade-Only Grand Tasting • Tribute Brunch • American Airlines Live Auction

Bobby Flay Meet & Greet • Sub-Zero/Wolf Dinner Series • Culinary Demonstrations • Lifestyle Seminars • Grand Tasting

A Weekend Event: March 5 through 7, 2004

www.sobewineandfoodfest.com

For information, contact Lee Brian Schrager, Festival Director at 1-800-432-6431 x1040 • leeschrager@southernwine.com