

IN THEIR WORDS...

In an extremely rare opportunity we heard directly from 30 industry CIOs about their jobs, their companies, their teams and their technologies.

Can you imagine being in a room of noted experts and being charged with the responsibility of having to pick one to interview? I am sure it sounds like a perfect situation, a kid in a candy store kind of opportunity. That is of course until you are the one who needs to choose which expert, or in our case chief information officer (CIO), to approach. Which ones have I already interviewed and when? Who might offer the most interesting perspective for my readers? If I pick the new CIO from XYZ hotel company will I offend Mary CIO who has been with ABC hotel company forever? I am sure that Rich faces this every year as he prepares to conduct the CIO interview for the October issue of *Hospitality Upgrade* right on the heels of annual The CIO Summit. The who's who list of attendees of the conference is certainly rich with options but how to decide. We decided not to this year!

In a flagrant departure from tradition, this issue's CIO interview is going to be a composite view of all the attendees of The CIO Summit. The source of the information that follows is a combination of open and frank discussions during the event and a detailed online interview that the attendees completed after the conference. The interview questions were divided into five sections: Personal information, company information, industry trends and challenges, product penetration and planned projects.

Who Are They?

As an overview, 40 CIOs representing all aspects of the hospitality industry attended the 2006 *Hospitality Upgrade* CIO Summit. Most of the group was from the United States with roots from Maine to California. Three of the CIOs hail from abroad including one that actually commutes from Paris to New Jersey. The average CIO has worked with technology for 18 years and has been involved in hotel technology for 12. Those who responded had over 500 years of cumulative technology experience. As a group, the CIOs have seen a lot of change over the years including such notable events as the widespread use of property management technology, on-demand guestroom entertainment, the rise and fall of long distance resale, data ports to HSPA, the commercialization of the Internet, and the first online booking of a hotel reservation via that eclipsing technology.

An educated bunch, 84 percent of the group hold bachelor's degrees and 17 percent have completed graduate work and have a master's degree. Most have grown up through the ranks of technology. When asked how they got to where they are today, 60 percent of the CIOs indicated that they had a technical background. Of this 60 percent more than half of them (34 percent) started their careers as software programmers. Other sources of this talent include network operations, business analysis/product management, help desk/system support, project management, hotel operations, accounting and consulting. It's amazing how their paths have converged. It's also interesting to see how many grew up in the business with backgrounds in hotel operations, accounting and sales. They clearly have a first-hand knowledge of how to apply technology and what the business needs.

An important part of getting to know these CIOs is hearing about how they spend their time. It's a good thing that they have an affinity for hotels.

What percentage of your time do you spend

| Activity | % Time |
|---|--------|
| Coaching your team | 18% |
| Technology infrastructure projects | 18% |
| Application development projects | 13% |
| End user/system support issues | 12% |
| Working with the company's executive team | 20% |
| New construction/acquired properties | 16% |
| Research and new technologies | 11% |
| Other | 14% |

Source: 2006 *Hospitality Upgrade* Online CIO Interview

What advice do you have for people considering a career in hotel technology or who may already be involved in the industry but aspire to be a CIO one day?

- Learn the industry and understand guest service. **~Nelson Garrido, Noble Investment Group**
- Understand the business. Don't get too caught up in technology. At the end of the day, there is a business to run. **~Daniel Bassett, TWELVE Hotels and Residences**
- Be a customer of the services you are selling, so you can relate to marketing and operations. **~Darrin Pinkham, Ginn Clubs & Resorts**
- Work hard at establishing your credibility as a value contributor to your organization. IT minds are very capable of contributing to all aspects of this business and should be tapped more often for our general problem solving and creative abilities. **~Fred Crespo, Rosewood Hotels and Resorts**
- Always be proactive and take the time to increase personal skills like project and financial management to become a major key player in your organization. **~Gerald Lampaert, Dolce International**
- Love it, or don't try it. The implication is that the most effective CIO or CTO would have some broad experience across many computing and communication platforms, so that they can more effectively evaluate the input from their various specialists in these technologies, and set a clear roadmap for how these technologies will evolve. **~Barry Shuler, Marriott International, Inc.**
- Try to wow your internal customers every day. **~Brian Garavuso, Hilton Grand Vacations**
- Embrace change. **~Ken Gay, Premier Resorts International**
- Continue to learn, research and keep abreast of current technologies. Learn the business. Understand it well and learn to translate between business processes and technology processes. **~Tim Rand, Silversea Cruises, LTD**
- Work at the front desk for a month. **~Jeffrey Stephen Parker, Magnolia Hotels**
- Learn people skills. **~Andrew Furrer, Kimpton Hotels and Restaurants**
- Any amount of operational experience is key to understanding the needs of front-line employees and the needs of our guests, two of our prime constituencies. **~Richard Rabinoff, Xanterra Parks & Resorts**
- Plan on working hard, have a vision and stick to it. Don't get sucked into firefighting. Let the fires burn and build a strong foundation. **~Ed Klein, Royal Resorts**
- Get formal IT&T training. There is no substitute. Be prepared to do a lot with a little. Vision and innovation don't exist in committees. **~Nick Price, Mandarin Oriental Hotel Group**

As a group, they travel extensively averaging about 27 percent of their time on the road. This ranged from a low of 3 percent to an astounding high of 75 percent. More importantly, the chart on page 50 gives you a sense for how they spend their workday. It's very encouraging to see how much time they spend with their teams and executive management.

Their Companies

Although most of the companies (80 percent) attending The CIO Summit operate hotels as their primary line of business, all segments of the industry were represented including cruise lines, gaming/casinos, timeshare, clubs and conference centers. A good cross section of the industry participated in the interview the largest of which was Best Western with over 4,300 properties. On the other end of the spectrum, CIOs from several smaller management companies also provided good insight into their operation. As a group, the CIOs have responsibility for over 11,500 properties and almost 1.2 million guestrooms. Given the size of the industry this is a staggering level of participation.

Resources are a constant concern for any manager. There was a wide variance in the number of employees the participants have supporting their properties. The total number averaged 2.18 FTEs including technology employees at a central location and in the field. Field-based technology resources were a much lower at .75 FTE per property. The numbers ranged from a low of zero technology employees at the property level to an impressive seven per property. This certainly speaks to the various ways companies have chosen to provide support and fund the technology function.

Speaking of funding, the vast majority (89.66 percent) of the companies rely on corporate allocations to fund their technology function. Of course that probably does not take into account the cost of field personnel which typically becomes a pure operating expense absorbed by the

hotel. The chart (How is your department funded?) identifies the source of IT funding for the companies that participated in the interview.

Other costs typically absorbed by the properties include those associated with the replacement of hardware when it reaches the end of its useful life. A bane to many, the annual capital budgeting process can be a challenge when the need to replace a server, phone system or outdated PCs competes for limited funds that could otherwise be used to buy new bedspreads or other FF&E. The best way to manage this is to establish a technology refresh policy that attempts to stabilize the level of technology spending over time. This group of CIOs has done an admiral job of implementing this kind of standard with 66 percent reporting that one is in place. On average, the respondents replace PCs and servers every four years and network equipment after five. Larger one-time projects such as the total replacement of a reservation or ERP system were not included in this question as they are typically treated differently.

One way companies have chosen to leverage available resources and manage costs is to outsource functions that are either not core competency areas or otherwise deemed more appropriately handled by others. A significant number of the companies represented in the interview

How is your department funded?

| Technology Funding Source | % of Respondents |
|---------------------------|------------------|
| Corporate Allocation | 89.66% |
| Support Fees | 31.03% |
| Transaction Fees | 10.34% |
| Combination of above | 31.03% |
| Other | 3.45% |

Source: 2006 Hospitality Upgrade Online CIO Interview

Does your company outsource any services? If so, which ones?

| Outsourced Functions | % of Respondents |
|--------------------------|------------------|
| Reservations | 21% |
| Payroll | 34% |
| Help Desk/System Support | 34% |
| Application Development | 38% |
| Other | 7% |

Source: 2006 Hospitality Upgrade Online CIO Interview

What is the most unique technology that you have implemented or have on the drawing board in your company?

We have developed an application called GHOST (Guest Hotel Operating System Terminal) that runs on a thin client in each guest suite. From the terminal, guests can access the Internet as well as a variety of hotel services. It is then linked to a service request system which tracks the request and ensures that it is completed by the correct staff member within a targeted time. The response has been overwhelmingly positive with over 60 percent of our guests using the system to receive services.

~Daniel Bassett, TWELVE Hotels and Residences

The manner by which Rosewood is going about implementing CRM is unique in our approach, scale and time frame. A truly best-of-breed solution was selected to handle central reservations, centralized guest history, guest preference management, reservation confirmations, pre and post-stay marketing, guest satisfaction surveys and marketing reporting. Guest experience and recognition was the driving force behind the business criteria assignment for each category. This allowed Rosewood's selection committee to keep focused on operational delivery and true functional value.

~Fred Crespo, Rosewood Hotels and Resorts

VOIP worldwide for both guests and staff.

~Gerald Lampaert, Dolce International

A family of self-service options, some that are being rolled out, and others that are in pilot programs, including sophisticated self-service check-in and check-out kiosks (in production), remote checkin with seamlessly mobile connectivity (in pilot), boarding pass printing (in production), and many other guest service options to come.

~Barry Shuler, Marriott International, Inc.

An electronic concierge system tied to the confirmation e-mail and Internet.

~Ken Gay, Premier Resorts International

As the first cruise line to implement on-board cell phone service, Silversea understands that our guests need connection while they are at sea.

~Tim Rand, Silversea Cruises, LTD

Multilevel secure access and biometric authentication at PMS level.

~Jeffrey Stephen Parker, Magnolia Hotels

I think our challenges might be unique (we operate in very remote locations, with poor-to-limited infrastructure, and we run a variety of operations from high-end lodging to campsites). We also operate in an extremely seasonal environment. At the same time, though, we have a tendency to veer away from 'unique' technologies. There's a certain implication that unique technologies come with unique needs, particularly in terms of support and maintenance. So we tend to focus on solving our complex issues with flexible, mainstream products and technologies that have the malleability to meet our needs.

~Richard Rabinoff, Xanterra Parks & Resorts

'Wave Goodnight to the Kids.'

~Nick Price, Mandarin Oriental Hotel Group

have chosen to use selective outsourcing as a means to expand their capacity. While the chart on page 52 provides insight as to what functions are most popular outsourcing targets the detail of the other category included shared services infrastructure, e-mail, database and Unix administration.

As part of the interview process, we thought it important to get a sense for the breadth of systems the CIOs and their teams support. In addition to the 30 choices we offered them we were

Please indicate what systems you currently install/support? (Check all that apply.)

| Supported Systems | % Responding |
|--|--------------|
| Back Office/Accounting | 93.1% |
| Business Intelligence | 79.3% |
| Call Accounting | 93.1% |
| Casino/Player Tracking | 6.9% |
| Catering and Event Management | 75.9% |
| Central Reservations | 55.2% |
| Club Management | 34.5% |
| Condo/Timeshare Management | 58.6% |
| Customer Relationship Management | 72.4% |
| Data Warehouse | 69% |
| Electronic Locks | 93.1% |
| Foodservice Management Systems—Menu engineering, kitchen display systems | 62.1% |
| Inventory and Cost Control | 72.4% |
| Kiosks and Remote Checkin | 34.5% |
| Labor Scheduling | 72.4% |
| Marina Management | 13.8% |
| Meeting and Event Planning | 72.4% |
| Package Tracking Systems | 41.4% |
| Payment Processing | 69% |
| Payroll | 93.1% |
| Point of Sale | 89.7% |
| Preventive Maintenance, Engineering, Work Order Tracking | 82.8% |
| Procurement | 69% |
| Property Management Systems | 93.1% |
| Spa Management | 72.4 |
| Surveys and Guest Response | 72.4 |
| Telephone Systems | 96.6% |
| Voice Messaging | 93.1% |
| Wireless Technology | 96.6% |
| Yield & Revenue Management | 69% |
| Other | 10.3% |

Source: 2006 Hospitality Upgrade Online CIO Interview

impressed to see that an additional 14 separate categories were mentioned in the other category.

Industry Trends and Challenges

This section of the interview was intended to surface trends in the industry and any challenges the CIOs foresee in the industry. When asked to list the three biggest challenges they face in their role as CIO the clear consensus was the lack of adequate budgets and resources to get the job done. This was closely followed by finding and motivating quality staff and a close third was aligning technology with the business. Other areas of concern included:

- Managing expectations
- End user training
- Data integrity between systems
- System standardization
- Project management
- Systems integration
- Vendor management
- The evolving network infrastructure in hotels

Many of these issues are not unique to the hospitality industry and it's great that our CIOs were able to share this insight. Working together to overcome some of the common issues they face is one of the major benefits of industry meetings such as The CIO Summit.

Given the pace that technology changes, keeping tabs on what's hot and what's not is critical but requires considerable effort. In light of the budgetary constraints already mentioned and the unique financial structure of the industry, the ability to capitalize on innovative new technologies can also be challenging. As people who focus on technology for the hotel industry, it's easy to assume that we know all that is going on. We asked the CIOs what technology trends they thought would have the biggest affect on the industry in the next five years and while there was considerable agreement, there were a few outliers. We all should keep our eyes open as outliers today become reality tomorrow. The CIOs seem to agree that the need for converged networks will be the most significant technology trend for the industry over the next five years. This should not be a surprise since it affects the core network infrastructure of the hotel and can be very costly to retrofit in existing buildings. Particularly as guestroom technology evolves, the need to upgrade in order to remain competitive should drive substantial investment in this area. It should be no surprise that the CIOs ranked wireless technology as the second most significant trend that the industry needs to address. While some might suggest that wireless technology will facilitate the converged networks mentioned above, it's not yet clear that the capabilities of this awesome technology will keep pace with the demand for bandwidth and reliability in the short term.

Tightly coupled with the first two trends is the CIOs' third prediction that advanced guestroom technology will be an ongoing area of focus over the next five years. The CIOs indicated that 57 percent of their companies have mounted a formal guestroom technology initiative which will undoubtedly drive a significant number of new features and associated bandwidth requirements. Features to look out for in the guestrooms of the future include:

IP/HDTV, in room PCs, environmental controls, online media and content delivery, RFID door locks and iPod® connectivity.

The level of consensus in their prediction of trends is uncanny. It is clear that convergence, wireless and guestroom technology are all inter-related and will consume many resources over the foreseeable future.

Product Penetration

One question is often posed: how many systems does a particular vendor have installed? Unfortunately, there is no definitive source for this kind information in the industry. Those who have been in the industry for a long time, probably have a pretty good sense for the penetration of certain products in the various system categories but anyone answering such a question should frame it with an appropriate caveat that it's anyone's best guess. Since the opportunity to poll such a group was too good to pass up we were interested to see how the numbers fell. Admittedly the sample size was relatively small and the responses to this part of the interview yielded no real surprises.

It's important to mention that the sizes of the companies responding to the interview varied widely and while one system may be in the top three of a 25 property management company, the single system installed at all of one of the big flags would easily eclipse that number. For this reason, we have chosen not to share the specific results.

Again, the data itself was not particularly meaningful in terms of absolute penetration in the industry, but the exercise did in fact surface some interesting information. Most notably, a large portion of the respondents indicated that their companies still rely heavily on custom developed applications. In fact, in both the PMS and CRS categories, custom software was the most common response. In part this may have been driven by the number of larger chains that participated in the interview as their unique needs and ability to support custom applications tend to drive larger companies in that direction. That said, it is worth mentioning that the overwhelming majority of the industry utilizes commercially available off-the-shelf software from the leading vendors in the industry.

Please indicate what enterprise systems projects you plan to undertake in the next three years. Check all that apply for each system listed. (Number of responses)

| Enterprise System | Underway | Upgrade | Replace | 1 Year | 2 Years | 3 Years | Not Planned |
|---|----------|---------|---------|--------|---------|---------|-------------|
| ERP | 3 | 2 | 1 | 1 | 1 | | 12 |
| Accounting/Financial Systems (Traditional GL/AP/AR) | 5 | 7 | 3 | 3 | | | 5 |
| Human Resources System | 7 | 4 | | 3 | 1 | | 6 |
| Central Reservation System | | 4 | 5 | 6 | 4 | 1 | 4 |
| CRM | 7 | 4 | | 4 | | | 5 |
| Sales Force Automation | 5 | 2 | | 3 | 2 | 1 | 7 |
| Groupware/Messaging/E-mail | 8 | 7 | | 3 | 1 | | 3 |
| Data Warehouse | 8 | 6 | | 3 | 2 | | 2 |
| Business Intelligence | 6 | 4 | 1 | 5 | 3 | 1 | 2 |
| Intranet/Portal | 10 | 6 | 1 | 1 | | 1 | 2 |
| Document Management | 8 | 1 | 2 | 3 | 1 | | 5 |
| Sarbanes-Oxley Tracking | 4 | 1 | | | | | 15 |
| Automated Workflow Tools | 2 | 2 | | 3 | 2 | | 11 |
| Relational Databases | 7 | 3 | | 2 | 1 | | 8 |
| Application Development Software | 4 | 3 | | | | | 13 |

Source: 2006 Hospitality Upgrade Online CIO Interview

Are there any big technology opportunities that you feel the industry is just missing the boat on?

- In horse racing, it is everything. Networks, infrastructure, wagering systems, et al.
~**Jay Rollins, Churchill Downs Incorporated**
- Leveraging technology to automate guest service requests.
~**Daniel Bassett, TWELVE Hotels and Residences**
- Fully integrated solutions, instead of separate best-of-breed applications with interfaces to run our resorts. ~**Darrin Pinkham, Ginn Clubs & Resorts**
- We continue to be challenged by vendors not working closely enough on standardized interfacing. HTNG and OTA have promised great strides in this area. However, the reality of dealing with a 'best-of-breed' technology implementation proves that we have a long way to go.
~**Fred Crespo, Rosewood Hotels and Resorts**
- The industry trend is toward more above-property enterprise-class software for transaction processing systems. The hospitality commercially available software packages that exist generally will not perform at the large scale required by major chain companies. Also, the individual packages of functionality typically do not adhere to emerging industry standards, making it difficult to integrate two or more packages 'out of the box'. ~**Barry Shuler, Marriott International, Inc.**
- Cost-effective delivery of technology to guests that meets expectations.
~**Jeffrey Stephen Parker, Magnolia Hotels**
- It's time to reengineer the entire application suite for the hotel business—central reservations, customer information, front desk management (PMS), back office, etc.
~**Scott Gibson, Best Western International**

Other questions in this category were a little bit more topical and provided some insight where the industry stands in terms of recent trends. For instance the respondents reported that 80 percent of their guestrooms were equipped with HSI; 27 percent are equipped with plasma, LCD or high-definition televisions; and 15 percent of the properties are equipped with VoIP telephone systems.

Planned Projects

The intent of this section of the interview was to determine the level of implementation

activity that is planned over the next three years across a variety of system families. All too often we get absorbed by the many hospitality-oriented systems and lose sight that there is a whole other class of enterprise applications necessary to run the business. The last two questions of the survey attempted to gather information to help quantify the number and type of systems projects from this subset of the industry.

Again, a study this small is not a great gauge on what is happening throughout the industry but may be indicative of the kind of projects the industry is embracing as important. The charts on this page and page 56 include the raw number of responses received from 20 of the 30 participants in the interview and provide some indication of the scope of the projects and the anticipated timeframe including whether the projects are currently underway.

Conclusion

This has been a very instructive exercise that clearly shows how many common issues the industry faces. Hopefully the participants received value out of the process and have made contacts that might come in handy the next time they face a challenge that one of their peers has already dealt with.

Thanks very much to all the CIOs who took time out of their very busy schedules to respond to the online interview. What started out to be a very short survey turned into a rather lengthy series of questions that required some thought. Wouldn't it be great to get this kind of information from the industry at large? It would be particularly interesting to see how their counterparts from the business might respond to some of the questions. Maybe that's a good idea for next year's interview?



Please indicate what business/property level system projects you plan to undertake in the next three years. Check all that apply for each system listed. (Number of responses)

| | Whole Company | Selective Properties | Underway | Upgrade | Replace | 1 Year | 2 Years | 3 Years | Not Planned |
|----------------------|---------------|----------------------|----------|---------|---------|--------|---------|---------|-------------|
| Property Management | 9 | 2 | 8 | 3 | 4 | 2 | 2 | | 2 |
| Central Reservations | 6 | | 2 | 1 | 3 | 7 | 3 | 1 | 5 |
| Point of Sale | 3 | 5 | 8 | 3 | 3 | 1 | | 1 | 3 |
| Sales & Catering | 5 | 3 | 5 | 1 | 1 | 2 | | | 7 |
| Telephone Systems | 4 | 5 | 6 | | 2 | | 2 | | 6 |
| Energy Management | 2 | 6 | 6 | 1 | | 1 | | | 8 |
| Guestroom Locks | 1 | 6 | 5 | | 3 | | 1 | | 9 |
| Guest Entertainment | 6 | 5 | 7 | 2 | 2 | 5 | | | 3 |
| Televisions | 7 | 4 | 10 | 1 | 5 | 2 | | 1 | 2 |

Source: 2006 Hospitality Upgrade Online CIO Interview

Please provide any additional insight or views you may have regarding the exploitation of technology in the hotel industry.

- You have to adopt an IT evaluation process, which includes all areas of your company within a steering committee structure, and then produces a vision of successful IT projects, implementations, and support that's centric to your company's core goals and objectives.

~Darrin Pinkham, Ginn Clubs & Resorts

- We should never fear to prove new technologies in the 'field' as our guests are continuing to be more sophisticated, informed and capable than ever before. Guest service is paramount to advancing this industry and keeping our revenues healthy. Any technology that enables that should be exploited at the first opportunity.

~Fred Crespo, Rosewood Hotels and Resorts

- When it comes to a multiproperty hotel brand, strongly consider the centralization of systems and strong LAN/WAN connectivity. This allows for a better management of investments, maintenance and upgrade costs as well as support.

~Gerald Lampaert, Dolce International

- Understand what is important to your organization and focus on that. Do not focus on the technology but rather the business.

~Brian Garavuso, Hilton Grand Vacations

- Remember that the service we provide is the product. The technology is only there to facilitate the delivery of the service. As such, we exploit the technology to make it easier to deliver quality service.

~Tim Rand, Silversea Cruises, LTD

- Technology has to exist within the fabric of our buildings for a long time. It is not easy to change even simple things as we exist in a 24/7/365 business. So, think long term. What is the guest of the future going to need from a guestroom in five, 10 or 15 years and who will this guest be?

~Nick Price, Mandarin Oriental Hotel Group