When Paradise City opens outside the Incheon International Airport in 2017, everyone working behind the scenes will be making sure the resort lives up to its name. The integrated resort will be the first of its kind in South Korea, with a grand hotel, theme park, convention center and casinos—all built around a modern Korean entertainment theme that captures the dynamism of K-pop culture. More than that, the goal is to build an immersive experience, complete with 3-D holographic images of the singers, synchronized dancers and fantasy figures known as “idols,” as well as an interactive hospitality system that can anticipate and create a unique experience for every guest. The goal: to bring the Korea Wave—the Hallyu invasion that has swept the world—to where it all began.

To make that happen, a lot of technology must work seamlessly—not just the apps and systems to run the business, but interactive technology that guests at the resort can hold in their hand with smart devices to control lighting or amusements at the theme park, as well as smarter security and faster check-in. To build the resort, Paradise has formed a joint venture with Sega Sammy Company of Japan, with a long history in pachinko and gaming technology. Behind the scenes, Paradise has chosen IBM as its IT strategy, integration and managed services partner.

Paradise is launching its new venture at a time of amazing innovation in the hospitality world. Hotels in Japan are staffed with robots. New York has virtual reality conference centers that are far more advanced than anything the average office building can accommodate. Companies can rent these reality rooms to hold meetings. And in Las Vegas, gamblers can use their smartphones to interact with house gaming systems.

As a greenfield development, Paradise City will have many options to build in cutting-edge features from the very beginning. More than that, the resort will be constructed on the Korean idea of cultural technology, a phenomenon that proponents of the well-oiled K-pop machine believe is more exquisite and complex than mere information technology. “Technology will be a big part of the experience,” says CIO Byung-Cheon Min. “It represents our main interface with guests. We want to make Paradise City a destination for repeat travelers.”

Min believes customers are “sticky” to the service levels they receive, and VIPs won’t come back if they have a bad experience. So Paradise City will focus on customer retention by creating an experience that drives repeat business, particularly among VIP travelers. That’s why Paradise City is leveraging IT to maximize customer experience on the front end and the back end.

Holograms and other futuristic technologies will be front and center at the resort, says Min. But Paradise City also is preparing for the future by building in greater capability to leverage analytics to understand and anticipate customer behavior and what will draw customers back. “It’s not just about having a strong IT service quality; it’s part of our corporate strategy,” says Min.

This is the right approach, say experts in the IT entertainment and hospitality industry. “You can have really great cutting-edge technology, but if you don’t offer a great guest experience, you will get bad reviews,” explains Professor Peter Nyheim of Pennsylvania State University in the United States, who is an expert in technology for the hospitality industry. “Everything has switched to the consumer. If a hotel is known to be cutting edge, then reviews will reflect that advantage.”

This is easier said than done. “For any hospitality venue, the biggest technology challenge is systems integration,” explains Nyheim. “At a most basic level, can your property management system interact with your entertainment systems and your billing systems?” In the case of an integrated resort such as Paradise City, this interoperability might extend to recognizing and remembering whether a client is a high roller or attending a conference with family. Or it may entail the easy use of a cell phone to order a poolside meal or visit the duty-free shop. (In fact, as the chart on page 2 shows, the top tech priority for hotels is customer-facing mobile solutions.) All of those systems will rely on the ability to collect, correlate and analyze data from clients and operations.

Behind the scenes, however, there is an emerging traffic jam of data, according to Hotel Technology Next Generation (HTNG), a trade group of CIOs in the hotel, entertainment and gaming industries. Part of the problem is the sheer number of different systems needed to run a resort, alongside the growing need to move large quantities of data from one system to another—for example, from a point-of-sale system to a customer relation system. Data warehousing and analytic applications typically require access to historical data, perhaps going back as far as five or more years, but many related systems are still set to operate one transaction at a time. “Business intelligence and
yield management systems have had this need for years, but as big data applications move mainstream, HTNG has heard from more and more members who face integration challenges around this issue,” the association reports. Moreover, the ability to manage complex integrations is among the IT skills most in demand in the hospitality sector (see chart below).

Without constant data flow, much of the high-tech, high-touch environment Paradise has planned would not work. The executives in charge of IT at Paradise Group are well aware of the challenges.

**A nexus of art, culture and technology**

For Paradise, the new resort rising out of the ground on Yeongjong Island will be the showcase for the company’s vision: to innovate through a nexus of art, culture and technology. Elevating technology as a pillar of corporate strategy marks a shift for Paradise Group. The company is undergoing a more comprehensive transformation—from a Seoul-based operator of 12 hotels and five casinos in South Korea that caters primarily to gamblers from mainland China to a globally recognized brand built on the idea of cultural technology.

To achieve this dramatic realignment of the IT function, Paradise Group CIO Min has had to take a hard look at how IT has been supporting the business and how his team can focus on the future for Paradise. “The IT team was supporting everything from facilities management to core applications,” he says. What’s more, the company was relying on a string of different small and midsize data centers, all operating on different standards and different hardware. Each property had different levels of redundancy and resiliency.

To be ready for Paradise City, Min needed a more robust and integrated data infrastructure. He also needed to keep his talent focused on creating and operating the kind of guest experience envisioned for the future of Paradise—the holograms and the VIP experience for high rollers—not on facilities management and software updates. What’s more, he needed to ensure a world-class security and resiliency posture in a business that cannot tolerate any downtime. For Paradise, claiming a spot as a global travel, convention and gaming destination means adhering to the best international standards, right down to the servers running the business.

The group turned to IBM to meet several goals. First, a consolidation will replace the piecemeal system now in place, bringing data from all seven existing centers into a Tier 3+ fully secure IBM data center close to Paradise City. IBM Global Technology Services will handle the move and provide end-to-end infrastructure management services, including a helpdesk, as well as creating a resiliency center for Paradise. The partnership with IBM will not only give Paradise an infrastructural upgrade, but IBM Resiliency Services will also provide critical backup in case of an outage, with full redundancy and a remote recovery site.

By moving to one location, Paradise will gain flexibility and scalability it didn’t have before, and in a dedicated environment. Most of the company’s other choices involved either a dedicated environment with a locked-in contract or a shared environment with room to grow. “This is a consumption model that will save the company on data center space while providing the ability to grow in a modular fashion,” says Wayne Lee, IBM Resiliency Services Leader in Seoul.

At the same time, IBM Global Business Services will provide application services for Paradise’s core applications, including System Application Products, Enterprise Resource Planning systems and other back-office functions. “IBM is not only partnering as an infrastructure service provider, but now we are a true end-to-end service provider for the Paradise Group,” says Lee.

---

**IBM Global Technology Services providing data center consolidation with an infrastructural upgrade and full resiliency services**

**ERM and other application services and back-office functions to be handled by IBM Global Business Services for a full end-to-end solution**

**Paradise can redeploy resources to focus on creating a cutting-edge experience for guests at its integrated resort**

---

How is the greater use of mobile, robotic and other connected technology affecting the gaming and hospitality industry?

Casinos are placing more reliance on technology to run the floor, and it's a heavy demand. Unless you're playing a high-stakes game, most of the tables are electronic. Slot machines, wheels of chance, craps tables and even card games like baccarat are all automated. No casino can afford to have a whole section go down because there is a glitch in the program or the robotics aren't working.

On the hospitality side, people are spending their hard-earned money, and they don't want to be turned away at the desk because the reservation system failed and their rooms are not ready. The demands for entertainment are slightly different. At a theme park associated with a hotel, for example, families can book entertainment from a display on the television in their room, and the reservation system can establish a profile for them. This is all handled through IT, and you have to have high availability for everything to work.

How important is interoperability in hospitality, theme park and casino systems? Does it play a role in resilience?

People are charging everything back to their rooms, both for the convenience and to take advantage of frequent stayer programs. All systems need to be connected for this to work—the reservation system, which is tied into maintenance, room servicing and food service, which needs to be tied into restaurants and the ordering system. Supply chain management is huge. But more than that, the more information a property can capture about a guest, the more targeted the marketing can be. Guests may get a card or wristband that works across the property. RFID chips can track where guests spend their time. How many times did they visit the casino? Do they like to shop? Did they take their kids to the amusement park?

This is the future of hospitality. The customer-resource systems that capture information are a form of artificial intelligence, like IBM’s Watson. It’s a matter of training and educating the system so it knows what to look for. The hospitality and entertainment industry is only beginning to realize the benefits of this. With this sort of data-mining, properties can become much more proactive, but it requires a continuous capture of data to work.

What specific solutions can IBM Resiliency Services offer hospitality enterprises, and how have they benefited from them?

We begin by asking clients to identify which client-facing systems they cannot afford to be without. How are those services delivered? What is tied into the infrastructure? What are you currently doing to ensure backup of data and information while ensuring you have the availability of these capabilities? Only then do we put together a strategy and implement solutions. After that, we begin a very rigorous testing program.

This is one thing that differentiates what IBM does: we place a significant emphasis on governance and testing. The governance program includes training, education and a very rigorous testing program. We really push it. I get a lot of strange looks when I say this, but I always tell clients, ”We need to figure out how we can hurt you.” We need to figure this out so we can put measures in place to prevent disaster or, if necessary, contain it.

Renewed focus on what matters

Min estimates that IT staff at Paradise have been able to devote only 40% of their time to core activities. By partnering with IBM, he wants to make sure his staff can devote the majority of their time to the core activities of designing and running a resort that emanates the kind of K-pop techy coolness that inspired the Korea Wave.

"Partnering is a very important step for Paradise," says Min, "not just for Paradise City, but for the whole company to develop an agility with how we create a customer experience and how customers choose to interact with us." He adds, "It’s also about process and governance, not just bringing up hardware standards or saving money. For us, it’s about how to have the right structure in place for the next decade, to be responsive to market trends and improve service quality and speed to market."

This end-to-end IT focus on the customer experience should pay quick new dividends once Paradise City opens its doors for business in 2017. Paradise plans on leveraging its existing client base in South Korea and among frequent business and VIP travelers to the country by expanding into duty-free shopping—a heavily regulated business now controlled by big global retailers. Since South Koreans are not allowed to gamble domestically, all of the casino patrons at Paradise will be from overseas and eligible to buy luxury goods at duty-free shops.

For the company, this new line of business will mark a return to the duty-free business it sold years ago, but this time as a global brand and with a technology interface that will offer many synergies. Combined with the high-tech, high-touch IT experience of the resort’s hotel, theme park and conference center, Paradise City will be ready to woo new and existing customers and cater to their needs and expectations by delivering that customer experience that drives repeat business—the holy grail of the global travel, entertainment and gaming industry.
ABOUT FORBES INSIGHTS

Forbes Insights is the strategic research and thought leadership practice of Forbes Media, publisher of Forbes magazine and Forbes.com, whose combined media properties reach nearly 75 million business decision makers worldwide on a monthly basis. Taking advantage of a proprietary database of senior-level executives in the Forbes community, Forbes Insights conducts research on a host of topics of interest to C-level executives, senior marketing professionals, small business owners and those who aspire to positions of leadership, as well as providing deep insights into issues and trends surrounding wealth creation and wealth management.

FORBES INSIGHTS

Bruce Rogers
Chief Insights Officer

Erika Maguire
Project Manager

SALES

North America
Brian McLeod, Commercial Director
Matthew Muszala, Manager
William Thompson, Manager

Europe
Charles Yardley, Managing Director

Middle East/Asia/Pacific
Serene Lee, Executive Director

EDITORIAL

Kasia Wandycz Moreno, Director
Hugo S. Moreno, Director
Deborah Orr, Case Study Author
Dianne Athey, Designer

RESEARCH

Ross Gagnon, Director
Kimberly Kurata, Research Analyst

To learn more about IBM Resiliency Services, visit: ibm.com/services/resiliency