



ISLE OF CAPRI CASINOS
MEETING CUSTOMERS WHERE THEY LIVE
CUSTOMER SUCCESS STORY



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EXECUTIVE SUMMARY

Isle of Capri is a unique and innovative player in the gaming industry. After entering the market in Biloxi, Mississippi in 1992, Isle has grown into one of the country's largest publicly traded gaming companies, mostly by establishing properties in the southeastern U.S., and in the country's heartland.

Isle, however, is not entirely unique. Like any gaming company, Isle's success depends largely on its relationship with its customers — its ability to create a gaming, entertainment, and hospitality atmosphere that anticipates customer needs and exceeds their expectations. Meeting such a goal is impossible without two important components: a company culture that is laser-focused on making the customer experience an enjoyable one, and a data and technology architecture that enables Isle to constantly deepen its understanding of its customers, as well as the various ways customer needs can be efficiently met.

After an initial data warehouse implementation was derailed in 2005, in part by Hurricane Katrina, Isle decided to reboot the project with entirely new components, including Teradata® as the core solutions partner, along with IBM Cognos 8 BI. Shortly after that choice was made, Isle brought on a management team that clearly understood how a Teradata and Cognos solution could enable key decision-makers throughout the operation to easily frame their own initial queries, as well as timely follow-up questions, thus opening up a wealth of possibilities to enhance the business. In the first four years, Isle has already achieved some deeply satisfying results:

- The company has dramatically accelerated and expanded the process of information gathering and dispersal, producing about 150 reports on a daily basis, 100 weekly, and 50 monthly, in addition to ad-hoc



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queries, completed within minutes, all day every day. Prior to an enterprise data warehouse (EDW) from Teradata, Isle produced about 5 monthly reports per property, but because they took a week or more to produce, properties could not begin to analyze monthly activity until the second week of the following month. Moreover, none of the reports analyzed anything less than an entire month at a time. Today, reports using up-to-the minute data on specific customer segments at particular properties are available, often the same day, enabling the company to react much more quickly to a wide range of customer needs.



ISLE OF CAPRI HAS REDUCED THE TIME NEEDED TO CONSTRUCT ITS CORE MONTHLY DIRECT MAIL CAMPAIGNS BY 50%.





ISLE OF CAPRI'S PIONEERING APPROACH IN PROMISING NEW MARKETS HAS ENABLED IT TO GROW INTO ONE OF THE LARGEST PUBLICLY TRADED GAMING COMPANIES IN THE UNITED STATES. ISLE'S PORTFOLIO HAS EXPANDED TO 15 PROPERTIES THAT COMBINE LODGING, GAMING, AND ENTERTAINMENT IN SIX STATES.

- ~ Isle has reduced the time needed to construct its core monthly direct mail campaigns by 50% and can generate less involved campaigns practically on the spot. In addition to moving faster, Isle has honed the process of segmentation and now can cross-reference a wide range of attributes, such as overall customer value, gaming behaviors, and hotel preferences. This enables them to produce more targeted campaigns aimed at particular customer segments and particular behaviors.
- ~ Isle also has enabled its management and employees to further deepen their understanding of customer behaviors by connecting data from its hotel systems and data from its customer-tracking systems and acting on that understanding through improved marketing campaigns and heightened levels of customer service. For example, the addition of hotel data offered new insights about the increased gaming local patrons do when they stay at a hotel. This, in turn, enabled new incentive programs (such as a free hotel night) that have pleased locals and increased Isle's customer loyalty.
- ~ The hotel data also has enhanced Isle's customer hosting program. By automatically notifying hosts when a high-value guest arrives at a hotel, hosts have forged deeper relationships with their most important clients. "This is by far the best tool we've had since I've been at the company," wrote one of the hosts.
- ~ Isle of Capri can now do more accurate property-to-property comparisons and analyses, largely because Teradata consolidated disparate data housed at individual properties and centralized it in one location. One result: a centralized intranet site posts daily figures for each individual property, so they can compare such things as performance of revenue from slot machines and table games, as well as complimentary redemption values. In addition, the IBM Cognos 8 BI enables additional comparisons, such as direct mail redemption values, specific direct mail program response rates, direct mail-incented gaming revenue, hotel-incented gaming revenue, non-complimentary (cash) revenue from hotel room reservations, and hotel room occupancy. One clear benefit is that it holds individual properties accountable for constantly raising the bar.
- ~ Time and again, the Teradata IBM Cognos 8 BI implementation has demonstrated the value of extending the power of data throughout Isle's enterprise, beginning with an important change in

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marketing strategy that shifted the focus to customer days. This includes immediate analysis of response rates to marketing campaigns, and the addition of profit and loss data that has successfully connected customer value and total property value. One example of the power of this integration: by joining customer value and total property value, Isle gains a better understanding of its customers — a population invisible to them before — enabling them to more effectively target marketing efforts, such as radio ads.

Perhaps most significantly, Isle has begun to add slot machine data to the mix. The most important and immediate impact will be the way in which customer value will inform purchasing of new machines and product placement on the customer floor. Down the road, the addition of this data also might position Isle to take advantage of server-based gaming, where slot machines on the casino floor will essentially be computer terminals that enable the casino to switch a game to a new one in a matter of seconds.

In short, as Isle constructs its solutions for regularly funneling slot machine data into the warehouse, its ability to use data to re-imagine the floor and forge ever deeper and more lasting relationships will exceed anything it might have expected when it embarked on this project nearly four years earlier.

BACKGROUND

In August 1992, at a time when legalized gaming was just beginning to open up in states outside of Nevada and New Jersey, Isle of Capri Casinos, Inc. became the first company to establish a licensed gaming presence in the Mississippi market. Over the next 18 years, Isle's pioneering approach in promising new markets has enabled it to grow into one of the largest publicly traded gaming companies in the United States. Based in St. Louis, Missouri, Isle's portfolio has expanded to 15 properties that combine lodging, gaming, and entertainment in six states.

The company is managed by a deeply experienced team of gaming professionals, with a collective 200 years of experience in the industry across 20 states, six foreign jurisdictions, and more than 75 different properties. Together, management has identified five core competencies:

- ~ Financial discipline
- ~ Database management and segmentation
- ~ Margin improvement
- ~ Improving the guest experience
- ~ Leveraging human capital

Management's strategy is to continuously improve operational effectiveness, to demonstrate strong financial discipline, and to deliver regional gaming and leisure experiences that match customer preferences; a strong customer focus is part of the DNA at Isle.

One demonstration of Isle's customer focus is its introduction of a program it calls See. Say. Smile.SM The program monitors and rewards employees based on their ability to deliver courteous service. The name is the literal embodiment of the program's goal:

- ~ Make eye contact with the guest.
- ~ Extend a friendly greeting.
- ~ Smile while wishing the customer well.

But improving the guest experience requires more than the culture embodied in See. Say. Smile. — it also demands a marketing process that builds loyalty by drawing on an increasingly in-depth and nuanced understanding of the casino's customers. This need was at the heart of the company's decision to build a robust data warehouse, complemented by leading customer relationship management and business intelligence applications — and is why management has made database management and segmentation one of its core competencies.

"Our technology is designed to elevate the gaming experience and to better understand and strengthen our relationships with customers," says Jeanne-Marie Wilkins, Senior Vice President and Chief Information Officer. "We can market more efficiently through customized incentives and promotions, and more effectively through a deeper knowledge of our guests, their preferences, and their behavior." Achieving that level of sophistication, however, is never easy. In the case of Isle, it meant emerging from a natural disaster with the will and foresight to innovate and invest. The result has been successful navigation of a punishing recession — and a company well positioned to accelerate when the overall economy shifts into high gear.

CATALYSTS FOR CHANGE AND PROJECT GOALS

The gaming business is among the most competitive in the entire U.S. economy. Consumers have many property choices and, increasingly, many gaming destinations from which to choose. One of the strengths of good gaming companies is the creation of effective marketing campaigns and promotions that keep customers coming back. Those campaigns are made possible by the vast amounts of information that casinos gather about the people who play at their tables and slot machines, stay at their hotels, and eat and drink at their restaurants.

For Isle of Capri, the marketing challenge can be particularly difficult because of the geographical diversity of its properties (Mississippi, Louisiana, Missouri, Iowa, Colorado, and Florida). The different geographies mean Isle's customers are also quite diverse. Therefore, to optimize marketing, Isle needs a sophisticated ability to segment, while at the same time maintaining and building an overall brand image.

With that in mind, the marketing and technology teams at Isle had long ago concluded that a single data warehouse, coupled with business intelligence and

analytical tools and capabilities, could boost its direct mail campaigns. In 2004, the company began its first data warehouse implementation.

Then, in the summer of 2005, Hurricane Katrina hit. At the time, Isle's headquarters were in Biloxi, Mississippi, and the focus shifted to recovery efforts.

As it began plans to move its corporate headquarters to St. Louis, Missouri, the company chose to reboot its data warehouse project, based at least in part on an awareness of the way data warehouse technology had advanced since they'd begun.

This time, Isle chose Teradata for its data warehouse, Teradata Relationship Manager® (Customer Interaction Manager) as its relationship management tool, and IBM Cognos software as its business intelligence (BI) platform.

Though at first the focus of the project remained the same — to use the warehouse to improve the company's direct mail marketing program — within a year of having the warehouse in place, a new management team, including Wilkins, had been assembled. Because of her prior experience with Teradata and IBM Cognos software in the gaming industry, Wilkins says, "I knew how rich the possibilities with this combination were."

As the new team came on board, the mission for the data warehousing project expanded to include the following:

- Enable cross-property and "rolled up" analyses through the use of larger data sets. This, in turn, facilitates more accurate property-to-property comparisons so that Isle of Capri could benchmark internally and against its peers and share best practices within the enterprise.

- Accelerate and expand the process of information gathering. In the past, some segmentation reports could not be produced; others might take weeks to produce. As one Isle of Capri executive put it: "Now we produce reports on a daily basis, literally within minutes, and it's really a huge part of our operation."
- Connect different business functions and areas (e.g., hospitality and gaming) so that executives can better understand customer behavior, particularly the customer interaction with slot machines and table games. This is critically important to the company's decisions on which games and systems to purchase, product placement, and the development of brand standards.
- Enable decision-makers to rapidly understand the effectiveness of various promotions and strategies, as well as the underlying dynamics of the operation so they can make smarter, faster decisions. The path to this result is empowering these decision-makers to frame their own primary questions and timely follow-up questions.

This last idea is essentially the paradigm for a modern BI environment: create an architecture that enables top executives through front-line personnel to easily find the information they need to make wiser strategic and tactical decisions. Older systems were so complex that only IT professionals could frame the questions in a way the system could understand, but in today's environment, analytics cannot just be for IT — and Isle executives knew that well.

"We wanted to give our business people all of the meaningful data we could find and the appropriate tools to enable them to ask their own questions without us standing in their way," says Wilkins.



"The warehouse and CRM solution enabled Isle to segment customers based on the frequency of their visits, which, in turn, has become a factor in determining the number, as well as the value of the offers."

— Mike Kelly,
Marketing Manager



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Chief Information Officer

IMPLEMENTATION AND RESULTS

PHASE 1: THE DATA WAREHOUSE AND CRM IMPLEMENTATION

In 2006, Isle of Capri began its Teradata data warehouse project when a Teradata team built a two-node data warehouse at a co-location center in Colorado. The original implementation was designed specifically to improve the company’s direct mail marketing.

Historically, Isle’s direct mail program had been managed piece-meal and drew on the casino management system (CMS) housed at each individual property. “The goal was to get our CRM processes to function through the data warehouse so that the ‘single view of business’ would boost direct mail (and e-mail) campaigns,” says Ryan Murphy, who today is Senior Director of Business Intelligence.

The new implementation accomplished that goal and more. In addition to the two nodes, the Teradata team handwrote extract, transfer, and load (ETL) processes in Perl and batch scripts in order to gather player data from the CMS. Over the initial few months, the Isle team created a variety of manual analyses and reports and conducted data validation. At the same time, a separate team built the initial versions of the CRM environment.

“Our first uses were marketing strategy updates,” says Murphy. “We determined what changes needed to be made, including changing the metrics for our marketing programs and standardizing the metrics across our properties.”

For example, Isle went from evaluating customer visits as a whole to the industry standard of evaluating customer gaming days. Previously, Isle used trip summaries because that was what was readily available in the source system.

Attaining more detailed information took specific expertise and taxed the source system, so it was difficult to identify the duration of a customer’s stay or whether they visited once a year or many times a year. “The trip value was viewed as the same, regardless of whether a customer spent one day or many days,” says Murphy. “As a result, marketing opportunities were lost.”

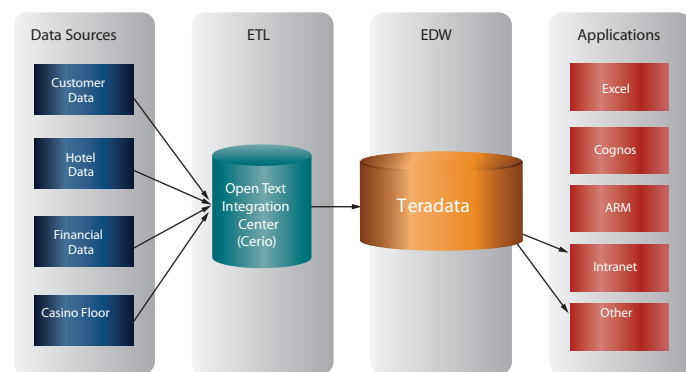
The Teradata solution changed all that, in part because it enabled the company to query large data sets. It also made possible the establishment of value metrics not already available in the source system; Isle could test, determine, store, and then repeatedly and quickly reference customer values based on daily activity. “The data warehouse helped convince people of the value of the change because it helped us see how trips or visits distorted the customer value picture,” says Murphy.

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The Isle BI team also began enriching and further scrubbing the data. A Trillium data quality management system added address, latitude, and longitude data to the system. In addition, the BI team began to better attribute various aspects of CMS data, such as the wealth of information in direct mail coupons. In the case of the coupons, each possessed a code that indicated a program type, such as whether the offer was part of a core monthly campaign or something that targeted new members — and whether it represented free play, cash, or a hotel offer. In the past, Isle had loaded this data, but had not used it, because there was no way to effectively access and use it. Now, Isle’s BI team began writing the business rules that indicate what the codes mean and how often the standards inherent in the offers are adhered to.

“We settled on business rules, wrote look-up tables, and added columns and classification IDs that could tell us immediately how much money the offer was for, the dates it was valid, and so on,” says Murphy. This enables the marketing team to understand which offers are being used — and by whom — and to tweak them accordingly.

Additionally, the team added internal management capabilities through the loading of profit & loss (P&L) reports that helped build a total revenue picture and establish a context for — and connection between — customer value and total property value. To accomplish this, the Isle BI team added a new data and content integration platform, Open Text Integration Center (formerly Genio), to its environment to load the P&L information into database tables in the warehouse. One example of the power of this integration: Isle gains a better understanding of its retail customers — a population invisible to them before — enabling them to more effectively target retail marketing efforts, such as radio ads.



DIRECT MAIL MARKETING GETS ITS BOOST

“Before implementing the warehouse and Teradata Relationship Manager, we didn’t have good analytics, so we couldn’t build direct mail campaigns easily,” says Senior Director of Direct Marketing Jim Luden. “To do anything at all required a lot of back-end [Microsoft] Access work.”

In contrast, with the warehouse and CRM solution in place, Isle can now quickly and easily identify a key market, segment the market, pull a direct mail file, and build several new criteria into it. The new and growing criteria made possible by a growing data store — as well as by the ability to quickly gather information and build campaigns — facilitates precisely targeted offers that Isle believes more successfully motivate people to come to the casino and to engage more profitably when they are there.

For example, the warehouse and Teradata Relationship Manager enabled Isle to segment customers based on the frequency of their visits which, in turn, has become a factor in determining the number, as well as the value, of the offers. “A player who comes four times a month needs a much less aggressive incentive than one who only comes once a month,” says Mike Kelly, Marketing Manager.

A team of four corporate marketers pulls the information and configures the campaigns. Individual properties receive the reports and proposed campaigns — and ultimately decide if they want to proceed or if they want more information. Then, the central marketing team executes the campaign, either by using a vendor for direct mail or by creating email campaigns in-house.

“We now give the people managing properties much better tools to make decisions about campaigns,” says Luden.

Primary among these tools is the IBM Cognos 8 BI platform. Now, if a property wants to evaluate the customer base from a particular geographic territory, they can build a report to analyze the play trends over time of customers from that area. These things could be done previously, but they were necessarily funneled through the two experts on the corporate business intelligence team; no one else could do any type of reporting, because creating the reports was a complex technical process. Enabling individual properties to ask some of their own questions and build some of their own reports fosters faster, more specific insights that lead to stronger customer ties and more profitable campaigns. For example, properties are better positioned to decide whether to spend more or less on coupons to a specific customer base.

There are numerous other benefits. For one, campaigns are constructed faster, with more recent data. “Before, it was a convoluted, two-month long process,” says Kelly. “We have essentially cut the time in half, which means the data we use is fresher and more relevant.”

The improved data quality enabled by the data warehouse implementation has also helped email marketing campaigns. “In the past three years, email has become a significant marketing channel for us, so we have prioritized the collection and quality of email addresses at our properties,” says Murphy. “Our marketers run weekly reports from the EDW on the volume and quality of new and modified email addresses by property and by individual employee. As a result, despite the number of email addresses tripling in the past three years, the quality of those addresses has increased.”

Moreover, both the marketing team and individual properties can now better track the results of their campaigns. For example, Luden and his team now know immediately when a customer used a coupon and the type of coupon. "This means we can really understand what worked and what didn't; it allows us to refine campaigns as part of our continuous, monthly direct marketing cycle," he says.

In addition, says Murphy, as the company stabilizes the production environment, Isle will be in a strong position to move to closed-loop marketing. In essence, as the results of each campaign are tracked, the system will automatically make the adaptations necessary to improve response rates and to target customers with more precision than before.

Generally, both Luden and Kelly strongly believe that the data warehouse and CRM implementations have significantly enhanced Isle's direct mail campaigns, though they note that it's too soon to determine the direct impact on response rates, revenues, and profits. There are two reasons:

First, the lackluster economy has dampened revenues throughout the gaming industry, which complicates the analysis of revenue impact. Nevertheless, Luden believes the data warehouse/CRM project has certainly mitigated the effects of the economic downturn. "The right question is: Where would we be if we didn't have it? And the answer is, we'd be a lot worse off," he says.

Second, the company isn't confident about the response rate data generated by analyses produced prior to the Teradata implementation, so feels it does not have enough information to do true "before and after" comparisons. Now, however, with an IBM Cognos 8 BI reporting environment built on top of the warehouse, the company has begun the

process of doing reliable analyses of response rates that will help effectively shape future campaigns.

"We are starting to use the apples-to-apples comparisons that Teradata builds right into the system," says Luden. "But I already believe that we are doing a much better job of getting the right offers to the right customers as a result of the Teradata warehouse and CRM."

PHASE II: PUSHING BUSINESS INTELLIGENCE THROUGHOUT THE ENTERPRISE

While Isle is clearly pleased with the effect of the Teradata implementation on its direct mail program, the team that eventually took command of the project believed that once the data, CRM, and BI tools were in place, the possibilities for using the warehouse to improve the business rapidly expand beyond direct mail. Consider just one situation that occurs with remarkable frequency in most casinos:

Before the Teradata solution, when a regular customer entered a property, upset that he never received a particular promotional offer, the front-line employee had no way to explain the omission, nor could the employee make an informed decision about whether to extend the offer on the spot or to apologize and move on.

That is no longer the case at Isle. Now, the person at the casino can request a quick query and respond in a way that helps retain the highest value customers; the casino employee can see immediately that they should extend the offer to this person. Given that a crucial touchstone for the Isle data warehouse project was improved customer interactions and the forging of better customer relationships, capabilities like this are enormously important.



"The data and the speed of delivery allows the marketing team to be more scientific about who gets what."

— Mike Kelly,
Marketing Manager

“In addition, we are increasingly using triggers, especially as we increase the frequency of data loading. It just makes less sense for many reports to run on a fixed time-of-day schedule when we’re loading data all day long and don’t have to wait until a particular time to execute.”

— Ryan Murphy,
Senior Director of Business Intelligence



“Phase II is the bigger story, because it’s where we can truly use our Teradata solution to scale up and add value,” says Wilkins. “We were no longer satisfied with getting better at segmentation and more efficient at producing mail. Many of us have used Teradata before at other companies, and we understand the value of consolidated data and putting data-driven tools into the hands of business decision-makers, including marketing professionals, operations professionals, hospitality executives, business experts — the entire spectrum of managerial talent required to run a successful gaming company. These people have incredible experience and expertise, and our goal was to empower them.”

Creating an IBM Cognos 8 BI reporting environment on top of the Teradata system was the centerpiece of Phase II, and there were a number of factors that contributed to making the IBM Cognos 8 BI implementation a success.

First, the new executive team at Isle of Capri had prior successful experience with both platforms, which helped make the choice of IBM Cognos 8 BI and the implementation easier.

Second, from a technology standpoint, Murphy says the evolution of the ETL and reporting environments also played an important role.

“For two years, we were using our data warehouse with hand-written, essentially manual ETL processes,” says Murphy. “That would not enable us to maintain the achievements of the first phase.”

In response, Murphy and his team deployed an Open Text Integration Center (OTIC, formerly Genio) data and content integration platform. The ETL migration to OTIC forced Isle to clean up its existing hand-written ETL and add governance processes by integrating additional metadata layers. This would facilitate more seamless upgrades and enhancements, cleaner data, and more maintainable scalable ETL.

Once the improved ETL was in place, Murphy and his team could go about making all of the data in Teradata — a little less than one terabyte — accessible to the IBM Cognos 8 BI platform. At Isle, IBM Cognos software primarily runs off the data warehouse using ROLAP (relational on-line analytical processing). “But we are also building a few cubes MOLAP (multi-dimensional on-line analytical processing) to provide the user experience of interacting with a cube instead of a report or query,” says Murphy.

While the technical implementation of the IBM Cognos 8 BI platform went smoothly with the help of a local

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consultancy, helping people to begin taking advantage of the system was not without its challenges. Educating staff at the individual properties was first among them. These were people who, for many years, had done all of their reporting from an IBM AS400 CMS system; suddenly, they had to work with a very different user interface. And though in theory the more modern interface is simpler and more intuitive, shifting long-held habits for accessing and using information is never easy.

Ultimately, however, as the advantages became clear, the shift successfully occurred. While the company already had in place some standard, printer-friendly reports that it automatically executed and emailed on a regular schedule, the data warehouse and IBM Cognos 8 BI platform began to enable Isle of Capri to look at other critical metrics that its standard reports would miss — and to do so much more efficiently. The entire project moved from a system where a handful of marketing analysts ran reports to a robust platform that allowed multiple business users to explore and make sense of the company's wealth of data.

Examples abound. Some executives get emails triggered not by a schedule, but by the occurrence of a particular event, such as when a transaction hits a certain level or a particular property has an outlier day. The marketing team can analyze their campaigns from multiple angles: daily revenue numbers are posted on the company's intranet so the various properties can compare performance of revenue from slot machines and table games; direct mail redemption values; complimentary redemption values; specific direct mail program response rates; direct mail-incented gaming revenue; hotel-incented gaming revenue; non-complimentary (cash) revenue from hotel room reservations; and hotel room occupancy.

In total, the system now handles several hundred queries a day, split between heavy use periods in the early morning and early evening, and the rest evenly distributed throughout the business day. Murphy estimates that between the standard and ad-hoc reports, the system generates about 150 daily reports, 100 weekly reports, and 50 monthly reports, as opposed to about 5 monthly reports before the new solution.

Among the most valuable of these reports is the hotel report for expected arrivals. Once hotel data was integrated with customer data in the EDW, it became possible to build a much more powerful expected arrivals report that includes customer value attributes calculated from data in the customer source system. Hotel workers can now not only see that a certain number of people are expected to show up on a given night, but also which of those are high-value customers. This information enables the hotel and the casino to anticipate and plan the most positive experience for those customers.

"In addition, we are increasingly using triggers, especially as we increase the frequency of data loading," says Murphy. "It just makes less sense for many reports to run

on a fixed time-of-day schedule when we're loading data all day long and don't have to wait until a particular time to execute."

Isle also took advantage of the aggregate join indexes (AJIs) in Teradata. "We have tested and created several AJIs to increase report performance without necessitating ETL development and maintenance," says Murphy. Isle now has AJIs that summarize direct mail, complimentary, and gaming transactions several different ways to address the needs of many reports. "These have saved several weeks of ETL development time, and twice that in maintenance resources."

But the real impact comes in the report performance. One example is an AJI that summarizes known customer revenue by day at each property. This is a very common request for numerous reports. Though simple to calculate even before the AJI was created, it used to take about a minute to run. The AJI makes the same query run in less than a second.

"For many reports in Cognos, one minute would have been perfectly fine, but for a query as commonly called as this one, reducing the run time from one minute to one second had a big impact, allowing for fluid querying and report-building," says Murphy.

Similarly, Teradata partitioned primary index (PPI) is a feature Isle added to several tables a couple of years ago, and it made a considerable performance difference in reporting. "Daily activity is the typical level of granularity at the heart of most of our analyses, so we partitioned some tables by business day," says Murphy. "Since most queries are looking for one or a range of days, query performance improved hugely as soon as we applied PPI."

In fact, says Murphy, as Isle has become more experienced with their new tools, it has learned to develop both more efficiently. For example, after implementing the Teradata PPI feature to physically partition data, Isle discovered that the performance of some of its older Cognos reports did not automatically improve.

"We found that while some reports returned correct results, they took a long time doing so, but with some specific tweaks to the report design to trigger the PPI feature, we could speed the reports," says Murphy. One example was a daily report that ran once for each property. Over time, the report expanded to include more and more metrics, and its performance slowed to about 15 minutes per property, totaling well over four hours per day, just for one report. By making report design adjustments in IBM Cognos 8, the reports began to take advantage of PPI without additional changes within Teradata.

"Consequently, we were soon running all of these reports in less than 10 minutes total each day, cutting 4 hours out of report execution time and system resource consumption," says Murphy.

PHASE III: DEEPENING AND BROADENING THE INSIGHTS

Even as the IBM Cognos 8 BI implementation began to realize the BI team's vision, the new management team believed there was a lot more to be gained. Not content to limit insights to just what could be gleaned from CMS and financial data, the company turned its attention to its hotels and slot machines. Both areas are important revenue sources for Isle; both flesh out the customer value and customer behavior picture and both can deliver important operational insights above and beyond understanding customer value (e.g., in the case of hotels conducting inventory or room mix analyses, such as how many king beds are needed versus queens).

ADDING HOTEL DATA

The company tackled the hotel piece first for a number of reasons, perhaps the most important being that acquiring the data from the IBM AS 400 lodging management systems (LMS) was quite similar to what had already been accomplished with the CMS. In addition, adding slot data posed both performance and regulatory concerns that, while surmountable, made more sense to tackle after another successful effort.

Using Attunity real-time data integration and event capture software, Isle set up an ETL process for the hotel business similar to what it had done for CMS. It also instituted a change data capture (CDC) mechanism for both the CMS and LMS, which pull from the transaction logs to track every change. So, for example, if a phone number is updated, the change is logged, enabling clear insights into what is the most recent data. Moreover, using CDC, rather than directly reading from the database, minimizes any performance impact on live operational systems.

Once the data integration building blocks were in place, the BI team engaged business users on the hospitality side to determine what they needed from hotel data; this enabled the BI team to build the processes that would be most useful. A number of key processes emerged.

First, Isle designed a way to tag customers by the number of days they stay in a hotel. Then, they generated insights by experimenting with a series of segmentations: Who stayed at least two or three times? Who gamed and who didn't? How much did staying in a hotel impact a customer's gaming activity?

The result was a vitally important, but counter-intuitive, insight that would have gone unnoticed without the new system's capabilities: Even customers who live close to the casino and don't need to stay overnight will game more when they stay in a hotel; in fact, they wind up gaming more than hotel guests who live farther away. Isle has effectively transformed that information into marketing campaigns that successfully incent local patrons to stay overnight, such as a free hotel night or offering a second free night during a separate week to encourage a second hotel visit to the property.

"The addition of hotel data to the warehouse enabled us to understand just how vital the hotel business is to our entire operation," says Luden. "We know now that not having visibility into the hotel side severely hindered our overall revenue and, in turn, that direct mail can drive hotel occupancy."

"For years we wanted to look at the interaction between the two; Ryan and his team joined these systems and got them to play nice together," says Kelly.



"For many reports in Cognos, one minute would have been perfectly fine, but for a query as commonly called as this one, reducing the run time from one minute to one second had a big impact, allowing for fluid querying and report-building."

— Ryan Murphy,
Senior Director of Business Intelligence

And as with the CMS data, using LMS data to improve direct mail is only one of the benefits. Another unexpected benefit is the ability to better serve the casino's top customers. The system now automatically generates an email to casino hosts when a high-value guest checks into a hotel property. The hosts — employees who are the interface between the casino and the high-value players — know well that their success depends on "high touch," so knowing when a great customer is on the property is invaluable. "This is by far the best tool we've had since I've been at the company," wrote one of the hosts.

Isle also uses hotel data to create a report that matches every expected arrival with their customer value attributes. This is important, because it enables the front desk people to make informed decisions about whose rooms to upgrade and how to best distribute available rooms.

And Isle is not stopping there. They have begun to look at other operational pieces that can add value to the overall business. For example, how much does the company make from meals charged to hotel rooms? How much from in-room movies? How should rooms be configured to best serve the highest value customers?

In essence, Isle of Capri taps into hotel data to get more profitable customers into the properties more of the time — and to serve them better during their stay. "The data and the speed of delivery allows the marketing team to be more scientific about who gets what," says Kelly. "We receive ratings twice a day or more from very current data that allows us to look at the business at a much faster pace. That's important because people don't always stick to the same behaviors, and we need to be constantly looking at trends and adapting appropriately."

NEXT STEP: THE SLOTS


Isle has recently begun its next major project leveraging the Teradata environment: the profitable slot machine business. "Slots are why most players come to Isle of Capri casinos," says Murphy.

The plan is to use the new solution to more closely and accurately track player activity, so Isle can deepen its understanding of its customers, further hone its promotions, and adapt the floor in each casino so as to optimize revenue and profit.

Slot data not only adds to the customer value and behavior picture, but slot machines are important assets in and of themselves, and the data from them can help Isle better understand a nearly endless array of questions about the casino floors:

- ~ Which machines drive the most revenue, given their interaction with customer value?
- ~ How long should each machine remain?
- ~ Are there particular machines in which the company should invest? Moreover, as the industry — and Isle — makes the transition to server-based gaming, the constant flow of data will help Isle make timely and informed strategic decisions about what games to make available, thus further enhancing their relationship with the highest value players.

Before that can happen, however, Isle must overcome a number of hurdles. The first is to create a process for acquiring data from the slot system and integrating it with customer data in the EDW. The challenge is compounded by the fact that performance of the slot systems must remain very high at all times. Furthermore, the process must account for regulatory limitations regarding slot systems. They are currently testing multiple potential solutions.



"Our technology is designed to elevate the gaming experience and to better understand and strengthen our relationships with customers."

— Jeanne-Marie Wilkins
Senior Vice President and
Chief Information Officer



THE COMPANY HAS DRAMATICALLY ACCELERATED AND EXPANDED THE PROCESS OF INFORMATION GATHERING AND DISPERSAL, PRODUCING ABOUT 150 REPORTS ON A DAILY BASIS, 100 WEEKLY, AND 50 MONTHLY, IN ADDITION TO AD-HOC QUERIES - COMPLETED WITHIN MINUTES - ALL DAY, EVERY DAY.

CONCLUSION: AN EVOLVING PROJECT DELIVERS GROWING BENEFITS

While the original plans for Isle of Capri's data warehouse project focused on the important but limited function of improving the company's direct mail marketing program, the introduction of a new management team, with successful experience using Teradata, and IBM Cognos software, quickly enabled the company to broaden its focus. And when one considers the goals set by the new team, what's striking is how many of them have already been achieved. Consider the following:

- The company has dramatically accelerated and expanded the process of information gathering and dispersal, producing about 150 reports on a daily basis, 100 weekly, and 50 monthly, in addition to ad-hoc queries - completed within minutes - all day, every day. Prior to the EDW from Teradata, Isle produced about 5 monthly reports per property, but because they took a week or more to produce, properties could not begin to analyze monthly activity until the second week of the following month. Moreover, none of the reports analyzed anything less than an entire month at a time. Today, reports using up-to-the minute data on specific

customer segments at particular properties are available, often the same day, enabling the company to react much more quickly to a wide range of customer needs.

- Isle has cut in half the time needed to construct its core monthly direct mail campaigns and can generate less involved campaigns practically on the spot. In addition to moving faster, Isle has honed the process of segmentation and now can cross-reference a wide range of attributes, such as overall customer value, gaming behaviors, and hotel preferences. This enables them to produce more targeted campaigns aimed at particular customer segments and particular behaviors.
- Isle also has enabled its management and employees to further deepen their understanding of customer behavior by connecting data from its hotel systems and data from its customer-tracking systems — and to act on that understanding through improved marketing campaigns and heightened levels of customer service. For example, the addition of hotel data offered surprising new insights about the increased gaming local patrons do when they stay at a hotel. This, in turn, enabled new incentive programs (such as a free hotel night) that have pleased locals and increased Isle's revenue and customer loyalty.

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~ The hotel data also has enhanced Isle's customer hosting program. By automatically notifying hosts when a high-value guest arrives at a hotel, hosts have forged deeper relationships with their most important clients. "This is by far the best tool we've had since I've been at the company," wrote one of the hosts.

Isle of Capri can now do more accurate property-to-property comparisons and analyses, largely because Teradata consolidated disparate data housed at individual properties and centralized it in one location. One result: a centralized intranet site posts daily figures for each individual property, so they can compare such things as performance of revenue from slot machines and table games, as well as complimentary redemption values. In addition, the IBM Cognos 8 BI enables additional comparisons, such as direct mail redemption values, specific direct mail program response rates, direct mail-incented gaming revenue, hotel-incented gaming revenue, non-complimentary (cash) revenue from hotel room reservations, and hotel room occupancy. One clear benefit of this is that it holds individual properties accountable for constantly raising the bar.

Time and again, the new solution has demonstrated the value of extending the power of data throughout Isle's enterprise, beginning with an important change in

marketing strategy that shifted the focus to customer days. This includes immediate analysis of response rates to marketing campaigns and the addition of profit and loss data that has successfully connected customer value and total property value. One example of the power of this integration: by joining customer value and total property value, Isle gains a better understanding of its retail customers — a population invisible to them before — enabling them to more effectively target marketing efforts, such as radio ads.

Perhaps most significantly, Isle has begun to add slot machine data to the mix. The short-term impact will be an enhanced ability to determine where higher-value customers prefer machines to be located, or to direct customers to new games based on their past behavior. Down the road, the addition of this data positions Isle to take advantage of server-based gaming when it becomes a reality.

In short, as Isle constructs its solutions for regularly funneling slot machine data into the warehouse, its ability to use data to re-imagine the floor, and forge ever deeper and more lasting relationships with customers, the company will exceed anything it might have expected when it embarked on this project nearly four years earlier.

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