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Defying the Odds: Using Decision Analytics to Win Big in the Gaming Business

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Defying the Odds: Using Decision Analytics to Win Big in the Gaming Business

Adapted from the Palladium Executive Conference presentation "Creating Actionable Business Intelligence to Drive Customer Loyalty and Profitability," given by Dr. Gary W. Loveman, Chairman, CEO, and President of Harrah's Entertainment, Inc.

By Lauren Keller Johnson, Contributing Writer

Many companies talk a big game about getting intimate with customers. But Harrah's Entertainment puts its money where its mouth is. Using decision analytics, Harrah's gathers ever-more-detailed data on its customers' activities when they visit the company's casinos. And it slices that data into ever-finer segments—identifying unique customer groups and targeting each with pitch-perfect marketing strategies. The payoff? "Monogamous" customers, Dr. Loveman explains, whose loyalty has transformed Harrah's from a relatively unremarkable player into an industry giant.

Competing in the gaming industry isn't easy: gaming aficionados can select from a wealth of locations—each one touting spectacular resorts, free drinks and gourmet meals, and glamorous entertainment. Back in the early 1990s, Harrah's Entertainment simply couldn't compete through these means against rivals such as Wynn Resorts, Bellagio, and Luxor. We didn't have the cash. We missed our earnings targets nine or ten quarters in a row and recorded a $6 million loss. People even thought that Donald Trump was planning to take us over.

We had to turn the company around—fast. But since we couldn't afford to make our facilities more opulent than our competitors', we decided to drive the turnaround through marketing. We had accumulated a huge warehouse of data from customer transactions at the many Harrah's casinos scattered throughout the United States. And we decided to use it in a different way. We set out to transform what we call "promiscuous" gamblers into "monogamous" gamblers—ones who would love only Harrah's. And we'd do it by customizing their experiences in our casinos based on what we knew about them. In fact, this customer information was our key asset.

Moving from "We Think" to "We Know"

In the mid-1990s, we started collecting even more transactional data on customers through our new Total Rewards program. Customers who joined the program agreed to let us gather and store detailed data about their activities—which Harrah's casinos they visited, which games they played, how much they won or lost, where they ate, what hotels they stayed at. The data is collected through cards inserted into slot machines and hotel and restaurant cash registers, as well as through handheld devices used at gaming tables. Membership is tiered: customers could progress through "Gold," "Platinum," "Diamond," and (the ultimate) "Seven Stars" levels based on what they spent, each tier qualifying them for higher levels of reward.

In return for letting us observe them and collect this information, we gave Total Rewards members free goodies (meals, rooms, shows) that amounted to 20 cents on every dollar they spent, which was unheard of in the industry. Today, the program has about 40 million members—roughly 80% of our customer base.

Total Rewards has helped us move from making marketing decisions based on what we think to making decisions based on what we know. For instance, we

Decision Analytics

Decision analytics (or "business analytics") is the discipline of leveraging analytics and performance modeling to create a tight link between key operational processes and desired strategic outcomes. It's all part of the new movement toward fact-based decision making, and away from decision making based on educated guesswork. Like customer relationship management, "analytics" refers to both the practice and the software and technologies that enable it.

The practice involves building performance models that highlight the key processes supporting the strategy; developing cause-and-effect analytical models that highlight the key drivers of the business; and leveraging technology solutions such as dashboards to provide insights to those on the front lines of the business. It enables companies to test assumptions and identify actionable information to adjust processes accordingly. Beyond traditional business intelligence, decision analytics is becoming core to strategy execution. It's behind some high-profile success stories besides Harrah's, such as Amazon.com, Capital One, the Boston Red Sox, and the Oakland A's.

Hitting the Jackpot

Thanks to its savvy use of decision analytics, Harrah's Entertainment has scored impressive results:

- Property EBITDA rose from $513 million in 1998 to almost $2 billion in 2005.
- Adjusted earnings per share jumped from $14 to $81 in the same period.
- Shareholder value has soared 25% per year starting in 1999.
- Compound annual growth rate in cross-market play (gamblers travel to other Harrah's casinos other than their "home" one to bet) rose 18.5% from 2000 to 2005.
- Revenue per available room jumped from $172 in 2000 to $268 in 2005.
- The company generated enough profit to upgrade properties in Atlantic City, St. Louis, and Las Vegas and to make the largest acquisition in the industry—Caesar's Entertainment—in June 2005.
- Increased profitability has enabled Harrah's to expand globally—in the Bahamas, Spain, and Singapore.

try particular marketing interventions (such as offers mailed to customers' homes) with each customer segment (such as "new visitor with low frequency of visits"). Then we observe those customers to see how closely their actual behavior matches what we predict. Did they in fact come back more frequently? Spend more when they visited? Based on what we learn, we can see which marketing decisions are the most effective. We can also identify our most valuable customers—those who visit us most frequently and spend the most—and focus our marketing investments on them.

With data on 40 million people available, this testing and refining process goes on constantly. And it has enabled Harrah's to take some counterintuitive steps to increase profitability—not only through tailoring our marketing efforts in new ways but also through managing our assets differently. The way we handle room reservations and slot machines are just two examples.

"The Right Heads in the Right Beds"

By using customer data in new ways, we've been able to make our hotel rooms more profitable. We learned that people who are willing to spend big dollars for a Harrah's hotel room tend to make their reservations—for example, for a trip during the holidays—at the last minute. We've been able to use this data to convince hotel managers that they can hold rooms in reserve for these profitable guests, with confidence that the rooms will be sold.

For instance, if a customer calls us in May to reserve a room for New Year's Eve, details about the customer's spending habits are immediately displayed on the employee's computer. If the customer is a low-value customer, the employee can choose to not to release a room, but rather to hold the room in reserve on the assumption that a highly profitable customer will call in early or mid-December to make reservations for New Year's Eve.

This was initially a tough sell to the hotel managers, since they tend to assume it's always better to sell more rooms faster, and their greatest fear is ending up with unoccupied rooms. But through this and other strategies based on our intimate knowledge of our customers, we've been able to increase our revenue per available room from $172 in 2000 to $268 in 2005. I think of it as getting "the right heads in the right beds."

Spotlight on Slots

We've also used Total Rewards data to better manage revenues from one of our most expensive assets—our slot machines. For instance, we learned that machines near the ends of long rows were most popular: People chose them because they felt less crowded there than at the slots in the middle of the rows. This meant that the machines in the middle weren't generating nearly as much revenue as the ones near the ends.

Our solution? We reconfigured our slots into shorter rows as well as boxy and circular arrangements, so that a higher proportion of the machines could be used without players' feeling overly crowded. This enabled us to get rid of 140 slots (18% of our total) and boosted revenues from the remaining machines by 45%.

Customer data has also taught us where the highest-revenue locations are. For example, we know precisely where in our casino our most profitable guests—65-year-old ladies from Indiana—like to play the slots.

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We can put machines in those locations and feel confident that those guests will not only migrate there, but they'll also play for a long time.

Real-Time CRM

Finally, knowing our customer has enabled us to implement customer relationship management in real time. For instance, we know immediately if a newcomer to Harrah's has just sat down at a slot machine and endured a loss that's two standard deviations beyond the mean. And we know that such guests—first-time visitors who are having a negative experience—tend not to come back.

When this set of circumstances arises, our database immediately signals an employee I call the "luck fairy" to wander over to the customer, greet her warmly, and give her an incentive to extend her play; for example, a coupon for a free steak dinner at our best restaurant that night. If we can persuade her to play longer, we know that her results will eventually revert to the mean—providing her with a more positive experience that will increase the chances she'll come back.

With the increased profits that our marketing efforts have generated, Harrah's has been able to invest in upgrading its facilities. We've also acquired Caesar's Entertainment and laid plans for expanding globally. Today, we have the biggest footprint in the industry: 4 million square feet of casino space, 40,000 hotel rooms, and 100,000 employees. So far, at least, our competitors don't seem to be trying to copy our use of customer data; they appear more passionate about making sure their properties remain as opulent as possible.

But that doesn't mean our difficulties are over. We'll need to find new ways to grow in the future; for example, by increasing revenues from nongaming operations. I think the challenges are going to get even tougher as we move forward. ■

TO LEARN MORE

See the forthcoming book by Thomas H. Davenport and Jeanne G. Harris, Competing on Analytics: The Science of Winning *(Harvard Business School Press, 2007); and Gary Loveman, "Diamonds in the Data Mine,"* Harvard Business Review, *May 2003.*