

# Case Study

## Optimizing Casino Patron Loyalty



### The Business Challenge

In the highly competitive gaming industry, casino property owners are actively using predictive modeling techniques to improve the efficiency and profitability of their acquisition and retention programs. However, the industry has not yet mastered fully utilizing data assets on play history and other transactional behavior of the customer. Lityx and our business partner DiamondStream - an award winning provider of strategic marketing operations and data analytics to the gaming industry - were engaged by a leading casino property owner in the U.S. to better leverage player data to improve marketing programs. Specifically, we were tasked with improving acquisition rates, predicting potential player value with more accuracy, and optimizing offers made to new and returning players.



### Our Solution

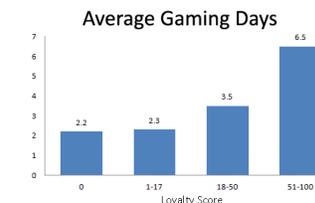
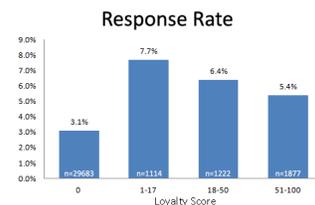
**Data** Loyalty card data was available for current casino customers and gave our team access to behavioral metrics such as length of trip, time spent on the playing floor, favorite games, speed of play, and day-of-week and time-of-day preferences. In addition, the team relied on data from Global Cash Access (GCA) which maintains a rich database of transactions for over 14 million unique patrons from 1,100 casinos globally. The GCA data provided metrics for individual prospects such as average daily withdrawal to determine their potential value, and regional market behavior such as recency and frequency of casino visits, number of days gaming, and transaction types.

**Predictive Analytics** For multiple casino properties owned by our client, a series predictive models was built to identify desirable targets in each regional market using PredictIQ. The models focused on predicting metrics such as average daily theo (ADT), frequency of visits, loyalty to the property, total gaming wallet, and propensity to respond to various offers. Models focusing on prospect behavior and current customer behavior were built in order to support both new customer acquisition and retention efforts.

**Offer Optimization** Casino patrons are sensitive to the offers they receive from the casino. We learned that if the offer was too small relative to their own perceived value, the patron would not respond. If the offer was too large, the patron may “walk out” after retrieving the offer value, or the property would forfeit potential profit. A series of Offer Optimization models was built to predict the right type and value of offer for each patron. This allowed DiamondStream to better target the client’s prospects and customers based on their patrons’ true value and interests.

### Feedback

“The dimensionality of the data drove the success of the predictive modeling and, ultimately, the programs’ results.”  
Brian Flynn of DiamondStream.



### Results

- Improved accuracy of predictions of future prospect value by 43%
- Increased prospect campaign response rates by over 20%
- Estimated 300% or more improvement to profitability from offer optimization