



## Business Intelligence Solutions for Gaming and Hospitality

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## Objective Summary

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The rise in popularity and the rapid growth in the Gaming Industry have created a much more competitive environment for all properties. Industry leading Gaming companies have expressed the need to identify and develop their clientele so as to enhance the guest experience, increase guest loyalty, and generate new business. This can be achieved using Business Intelligence and Customer Relationship Management (CRM) solutions to provide greater Property and Guest Intelligence delivering a total guest view. These solutions will enable companies to:

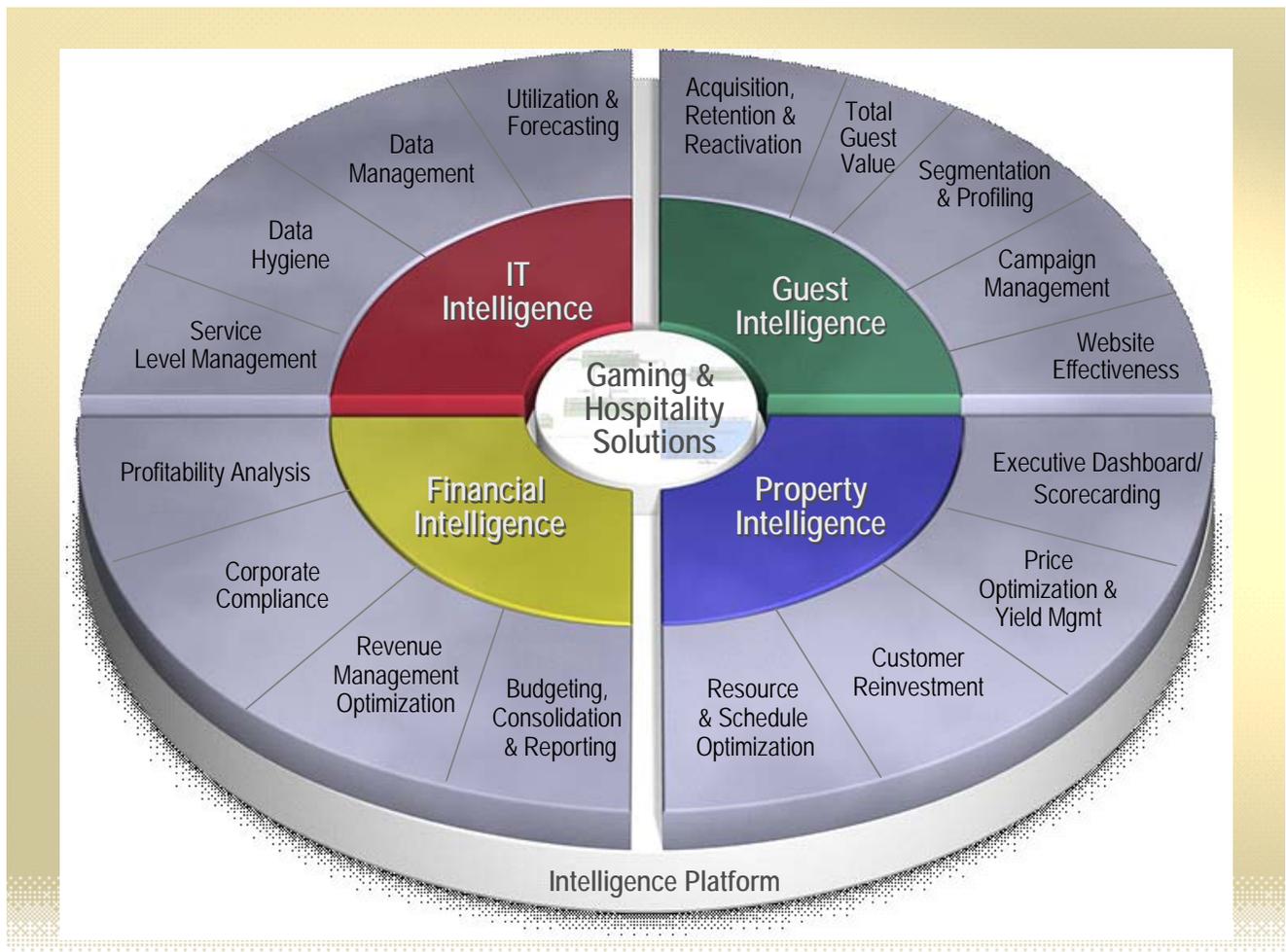
- Leverage the full range of their overall property data to better understand guest preferences in:
  - Slots
  - Player Cards
  - Table Games
  - Hospitality
  - Food and Beverage
  - Retail and Entertainment
  - Marketing Promotions
- Gain greater guest intelligence for more individualized customer communications and touch points
- Pinpoint influencers on player behavior to drive greater gaming revenue
- Maximize the total guest value by attracting and retaining customers with the greatest propensity to be profitable over their lifetime
- Realize the effectiveness of the various promotions and marketing campaigns
- Forecast the future value of guest activity and project property revenue streams based on advanced analytic techniques
- Understand how guest spend and gaming activity, promotions and hotel fill rates affect the financial bottom line of the property

All of this information will empower a company to deliver a gaming and hospitality experience that will have customers feel important and well served. Additionally, it will allow company executives to make better and informed decision towards their guest's and properties.

## SAS Business Intelligence for Gaming & Hospitality

SAS and Qualex provide a complete, integrated end-to-end set of solutions being utilized throughout the gaming and hospitality industries. They provide a framework that can access any type of property source system, from any platform and create a centralized data store for guest and property information providing a wide array of reporting and analytic capabilities. The system can clean and consolidate information for guest activity across the property.

Once the cleaned/consolidated data is in place and available, the SAS system allows for several strategic options for leveraging this full property and guest level information. The diagram below illustrates the SAS information platform and the wide spectrum of information it can provide.



# Property and Guest Intelligence

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## *Property Intelligence*

Property Intelligence provides the following benefits through the use and implementation of leading edge SAS Business Intelligence tools and Qualex Consulting experience implementing in the Gaming industry:

- ***Total Guest View***

Integrates guest interactions into a single repository/data warehouse. This creates a true value for each guest, which combines transactions from each operational system: Player Tracking, Slot, Table Games, Hotel, POS, Retail, and F&B. This approach will reduce the impact on the operational system performance for report generation and analysis. SAS provides a unified view of guests across the enterprise that incorporates information from all touch points and channels, ensuring that customer information is consistent, secure, accurate and comprehensible to users.

- ***Data Cleansing and Hygiene***

This will allow a property to maintain the quality of information that is being collected ensuring reliable data. This will allow for consolidated information for an individual guest and their household as well.

- ***Prompt Comprehensive Reporting & Analysis***

The system and tools will provide the ability to create standard reporting and conduct analysis for finance and operational departments. It empowers the organization to analyze information in new ways such as slicing and dicing data, easily creating interactive reporting templates and comprehensive reporting across several areas of the organization in a Web based environment.

### ***SAS Enterprise BI Server***

SAS Enterprise BI Server offers a fully integrated and comprehensive suite of business intelligence software. Fit-to-task interfaces for query and reporting combined with SAS analytical capabilities deliver accurate information and insights across the organization.

SAS Enterprise BI Server delivers intuitive interfaces that enable diverse users throughout an enterprise to get consistent data and accurate insights so they can make better, fact-based decisions. It delivers a Query and reporting environment that provides fast access to consistent, accurate intelligence. Customer organizations can save time and money with:

- BI interfaces designed for different users at all levels.
- Self-service access to data, no matter how complex.
- Fast access to multiple data sources.
- Flexible report authoring and editing.
- Simple deployment, management and administration.

**Reporting** All levels of users can produce and access reports. SAS reporting is self-service so information consumers can access and generate reports on their own. Users can quickly access data and make business decisions, while IT is able to spend time concentrating on more strategic objectives. Because SAS reporting is delivered through a zero footprint interface, software does not have to be installed on individual desktops, saving both time and money. Multiple interfaces are tailored to the different skills and business needs of individuals throughout an organization and users can work in familiar environments (Web browsers, e-mail, Microsoft Office, etc.), so deployment is fast and the need for training is minimized.

**Query & Analysis** Ask new questions and quickly get the answers. SAS provides multiple query interfaces for differing skill levels, enabling information producers to access and query data on their own without having to learn new skills. SAS can access more than 70 data sources with the power and interoperability to query across multiple databases and platforms. Complex analysis can be performed in familiar Microsoft Office environments, with the added advantage of overcoming the file size limits in Excel.

**OLAP Analysis** allows users to analyze summary data organized along business dimensions. SAS business intelligence integrates OLAP data storage and navigation into the reporting environment. SAS Enterprise BI Server provides a powerful multidimensional database designed to provide fast, easy access to large volumes of summarized data. A web-based data exploration interface lets users look at large volumes of data quickly from multiple angles. They can get high-level views of data, as well as view increasing levels of detail.

**Visualization** An extensive suite of graphical data presentation options are included for business and scientific use. These graphics can be produced as reports that can be surfaced in the portal or as part of an application, or as a freestanding graphic. Charts and plots can be created

and delivered on hundreds of different devices. Users can also create and integrate geographic maps within the OLAP application as an interactive data exploration interface.

**Integrated Analytics** SAS is the market leader in analytics. Now more users can leverage these powerful analytic capabilities. This can include analytic results or the ability to include and run analytic models directly from within their BI interface of choice – Web browser, portal or Microsoft Excel. SAS analytic algorithms are of the highest quality in the industry, ensuring accuracy and precision for greater certainty and confidence in results.

**Microsoft Office Integration** Leverages SAS capabilities in data access, reporting and analytics directly from Microsoft Office. SAS functionality is seamlessly integrated into Microsoft Office. Customers can analyze data that exceeds the data size limitation of Microsoft Excel both in size and in the data source platforms. Business users have self-service access to SAS analytics from within Microsoft Office allowing the implementation of business analysis standards within a company. Enterprise data from multiple platforms is easily available to business users from familiar Microsoft Office environments.

## ***Guest Intelligence***

This solution leverages the existing strengths of the SAS Marketing Automation solution that has recently been named the 2004 product of the year by Customer Inter@ction Solutions magazine. It also leverages the strengths of SAS Web Analytics. Guest Intelligence provides the following benefits:

- ***Targeted Guest Marketing Strategies***

Utilizing advanced analytic techniques, client properties will have the tools to be able to conduct targeted marketing campaigns using proven statistical techniques in a user-friendly manner.

- ***Manage Marketing Effectiveness***

The system will allow management to better understand the results and effectiveness of the marketing campaigns and promotions plus how they affect the financial bottom line.

- ***Media Optimization***

The organization will be able to fully understand how to optimize their media expenditures and maximize their reach to their target markets. This system allows the property to effectively increase revenue per advertising dollar spent by optimizing various media channels.

- ***Contact Management***

Contact Management enables the property to analyze, manage, and optimize the time, frequency, and message specifics of guest communications.

- ***Web channel effectiveness***

Web Analytics enables the property to be proactive in reaching out to customers online. With it, the property can quickly and precisely segment customers and then apply rules-based engines to link specific offers with chosen segments providing a more personalized customer experience. This can lead to immediate increases in customer satisfaction and Web bookings. Over the long term, guest retention rates and lifetime guest value also rise.

### ***SAS Marketing Automation***

SAS Marketing Automation helps improve response rates and revenues by giving you the ability to easily manage sophisticated, personalized customer communication strategies and deliver marketing offers at the most appropriate time. The most sophisticated and comprehensive marketing automation solution available, SAS Marketing Automation helps:

**Manage guest life cycles.** Guest segmentation and profiling capabilities consolidate insight at a guest level to build and monitor critical strategic segments over time.

**Improve effectiveness** through better targeting, measurements and analytics. Through advanced analytic techniques such as data mining, market basket analysis, link analysis, forecasting and optimization, as well as segmentation, profiling and behavior analysis, SAS Marketing Automation helps you better understand guests' past behavior and predict future opportunities.

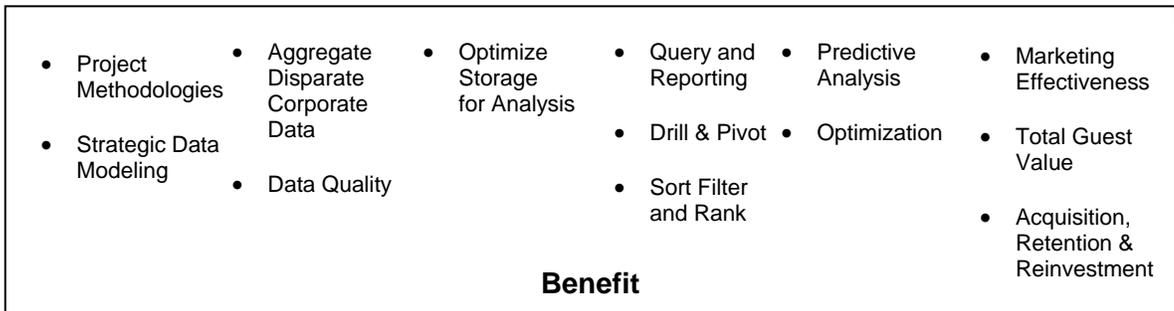
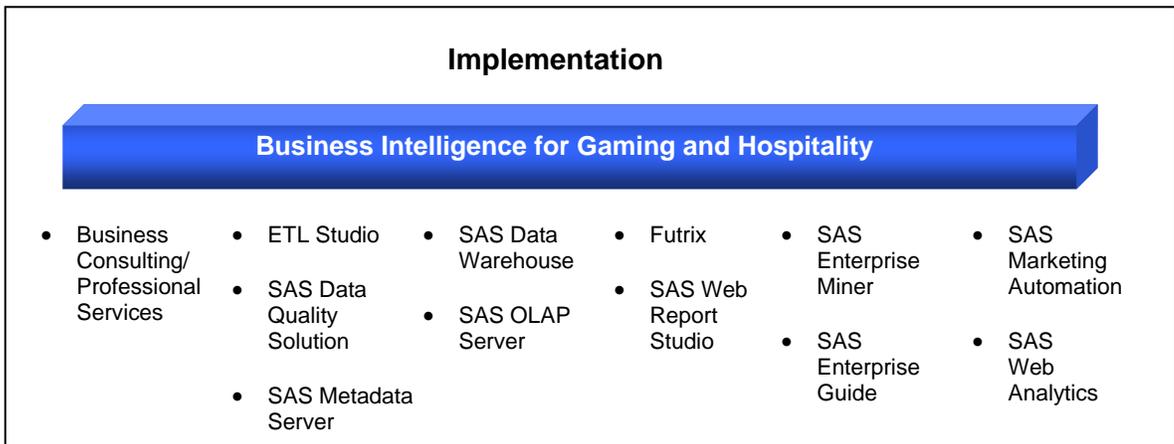
**Drive complex communication strategies.** Through an intuitive graphical interface and in-depth campaign management functions, business users can easily deploy the results of advanced analytics and drive multi-channel, multi-stage communications using reliable customer intelligence.

**Understand the results of marketing activities.** SAS Marketing Automation allows users to fully understand campaign responses, whether those responses involve direct communication or subtle changes in behavior. Reports on campaign effectiveness combine this response analysis with budget expectations to deliver a full picture of the financial return achieved by each marketing initiative.

**Provide integrated support** for all business units. SAS Marketing Automation fully supports the activities of your key marketing campaign participants, including business users, database marketers, quantitative analysts and IT.

**Manage your IT infrastructure.** Allowing companies to take advantage of their existing IT infrastructure, SAS Marketing Automation is built on technology that can be deployed across the enterprise in a scalable, multi-tier architecture

## The SAS/Qualex Solution



## Harrah's Hits Customer Loyalty Jackpot

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### SAS® Identifies Customers With Highest Potential To Return

In the high-stakes world of the U.S. gaming industry, success is often measured by glitz and glam. But Harrah's Entertainment, the world's largest gaming company, demonstrates that success is not always based on size or stature. In fact, while Harrah's competitors have continued to pour more and more revenues into bigger buildings and more extravagant facilities, Harrah's has chosen to invest heavily in customer relationship management (CRM) technologies and marketing techniques that build customer loyalty.

With a CRM architecture that includes SAS software for predictive analysis and business intelligence, Harrah's has combined advanced technology with innovative marketing expertise to encourage its best customers to return to its casinos again and again. As a result, Harrah's Total Rewards card is the industry's most sophisticated national multi-brand loyalty program, and the company ranks No. 1 in profits as a percentage of revenues.

"We've really chosen a path less traveled," says David Norton, senior vice president of relationship marketing. "By focusing on technology and relationship marketing, we've been able to leverage our distribution advantage and engender loyalty across every key market." For Harrah's, those key markets include locations in Arizona, California, Illinois, Indiana, Iowa, Kansas, Louisiana, Mississippi, Missouri, Nevada, New Jersey and North Carolina – a more diverse distribution of properties than any of its competitors.

## Background Information

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### ***About SAS***

SAS is the market leader in providing a new generation of business intelligence software and services that create true enterprise intelligence. SAS solutions are used at more than 40,000 sites—including 90 percent of the Fortune 500—to develop more profitable relationships with customers and suppliers; to enable better, more accurate and informed decisions; and to drive organizations forward. SAS is the only vendor that completely integrates leading data warehousing, analytics and traditional BI applications to create intelligence from massive amounts of data. For nearly three decades, SAS has been giving customers around the world The Power to Know®. [www.sas.com](http://www.sas.com)

### ***About Qualex Consulting***

Qualex Consulting Services, Inc. was founded in 1995 with a goal to create the highest quality SAS consulting company in the world. Our corporate mission is to establish a very responsive organization that provides the highest quality SAS experience and expertise to our clients. Qualex currently employs over 30 highly skilled SAS consultants and has access to 500+ SAS professionals throughout the United States. Qualex is a SAS® Alliance Gold Member and specializes in the use of SAS technologies. Since its inception, Qualex has worked on many consulting projects and across diverse industries, mostly at Fortune 500 companies. Most recently, Qualex was honored with the 2004 SAS Field Choice Award for the Gold Alliance member most effective in working with SAS customers. [www.qlx.com](http://www.qlx.com)