

# BUSINESS INTELLIGENCE

## WHAT'S THE HYPE ABOUT?



by Sally Kelly

**B**usiness intelligence (BI) is not an oxymoron, nor is it the alchemy that allowed medieval philosophers to believe that they could transform lead to gold. Business intelligence is a broad category of applications and technologies for gathering, storing, analyzing and providing access to data to make better business decisions and, as a result, achieve competitive advantage.

This article provides some basic approaches that will help companies evaluate BI initiatives. By doing so, they can see what value these solutions may hold for their organization and make more informed decisions about whether to implement them and how.

For the hospitality industry the application of business intelligence could include anything from the implementation of a customer profitability analysis, to an analysis of the take rate for high-speed Internet access and the purchase rate of new items on the

restaurant menu, to an inventory process analysis designed to make inventory “just in time” to avoid carrying costs.

Business intelligence applications include the activities of decision support systems, query and reporting, online analytical processing (OLAP), statistical analysis, forecasting and data mining.

Business intelligence applications can be:

- Mission critical and integral to an enterprise’s operations or occasional to meet a special requirement;
- Enterprise-wide or local to one division, department or project; and
- Initiated or driven by user demand.

The term business intelligence was used as early as September 1996 when a Gartner Group report said:

“By 2000, Information Democracy will emerge in forward-thinking enterprises, with business intelligence information and applications available broadly to employees, consultants, customers, suppliers and the public. The key to thriving in a competitive marketplace is staying ahead of the competition. Making sound business decisions based on accurate and current information takes more than intuition. Data analysis, reporting and query tools can help business users wade through a sea of data to synthesize valuable information from it – today these tools collectively fall into a category called business intelligence.

The definition of business intelligence has expanded to include applications that provide a more holistic view of organizational performance and technologies that enable organizations to carry out predictive analytics. This gives them an increased ability to use data to understand their customers and markets and to plan for the future.

### “Show Me the Money” or Tips for Getting Funded

It wasn’t only Jerry McGuire who was asked “show me the money.” Each organization seeking to implement business intelligence will have to answer the return on investment (ROI) question for their organiza-

tion. The magicians have moved on — those with the fancy tricks who were supposed to pull fortunes from thin air. Now it’s back to reality. A reality that for the hospitality industry includes economic recession, slower growth and decreased profits.

Not surprisingly, there is pressure to return to business basics: good governance, real revenues, careful planning, cost control, profitability and stakeholders — investors, regulators, customers and others — are demanding it. But meeting these demands is challenging. Among other things, senior management is faced with the task of deciding which ventures and initiatives should be funded and which curtailed or abandoned.

Business intelligence solutions are designed to help companies efficiently access and analyze data in order to operate more effectively. Business intelligence solutions can prove valuable in analyzing the effectiveness of ongoing operations and special initiatives alike. And so business intelligence can make an important contribution to better management. But in the harsh light of today’s new business reality, investments in business intelligence are receiving the same scrutiny as every other business initiative.

### Five Simple Rules for Getting Started

Business intelligence is more than the simple ability to collect and aggregate data and then report on it. Business intelligence also means looking at the processes associated with the collection and reporting of that data to make sure that both the input (data) and output (reporting and analytics) processes are working in harmony to achieve the optimal result, and then defining the optimal result within the context of your business.

Here are five key areas to consider when getting started with a business intelligence initiative:

**1 Inventory all of the data from all of the available sources** – Examine all the data that is available to you from all of the sources that you may wish to consolidate for business in



**TABLE 1: GENERIC CROSS-REFERENCE TABLE—DATA AND SOURCE SYSTEMS**

SUBJECT AREA	H360 TABLE NAME	Activities	Concierge	Demographics	External Hygiene	External Lists	External Scoring	Food & Beverage	Golf/Recreation	In-room Amenity	Internet	Loyalty	Profiling	Reservations	Retail POS	Sales & Catering	Spa
Activity	activity	X	X					X	X	X	X		X		X		X
Activity	activity_participants										X		X				X
Activity	client_purchased_bundles													X	X	X	
Activity	client_stay													X			
Activity	client_survey										X		X				X
Activity	client_survey_response										X		X				X
Activity	spend		X					X	X	X				X		X	X
Activity	spend_items		X					X	X	X				X		X	X
Client Core	client			X	X	X					X	X	X	X	X	X	X
Client Core	client_address			X	X	X					X	X	X	X	X	X	X
Client Core	client_email			X	X	X					X	X	X	X	X	X	X
Client Core	client_phone			X	X	X					X	X	X	X	X	X	X
Client Profile	client_dependents	X	X	X		X					X		X	X	X		
Client Profile	client_group		X		X							X	X		X		
Client Profile	client_memberships		X			X					X	X	X	X	X	X	X
Client Profile	client_opt_in_out		X								X	X	X				
Client Profile	client_preference	X	X	X		X		X			X	X	X	X	X	X	X
Client Profile	client_profile	X	X	X		X		X			X	X	X	X	X	X	X
Client Profile	client_relationship	X	X	X		X					X		X	X	X		
Client Profile	client_scoring_model						X										
Hygiene	client_address_hygiene				X												
Marketing	client_origin_source					X					X						
Marketing	client_relationship		X											X	X	X	
Marketing	client_segment					X					X						

telligence purposes. This data would include customer, financial, external and transactional data. From this analysis you may find that you want to make process changes associated with the data, its collection and/or maintenance. What is the data that is being collected? What is the frequency of the data collection and updates to the data? Is all of the data collected used (e.g., the collection of a customer birth date)? As an example of data maintenance, let's look at customer address data. When was the last time an update for that data was collected? When was the data collected and by whom? How was the data input into the source system?

Table 1 is a generic look at what consolidated customer data reporting and analytics might look like using business intelligence tools.

**2 Integrate all sources into a single repository** – All data should be integrated into a single source for reporting and analysis purposes. From this single source the data can then be segregated by purpose into either an operational data

store for operational reports or into a data mart for data mining and analysis purposes.

**3 Establish a common structure for all products and services** – To achieve optimal results in a business intelligence implementation, look across your product and service offerings and determine the types of data collected and the common structure for each of the products and services offered, making changes where necessary. There is, more than likely, a great commonality to many of these products and services that is not reflected in current processes or data collection efforts.

**4 Establish a common structure for all financial transactions** – Each of the products and services identified above, most likely, will have a financial component associated with it. The establishment and maintenance of a common financial transaction model is critical to

achieving excellence in reporting and analytics.

**5 Establish a common structure for all activities** – Whether it is the sale of food and beverage, golf or theater tickets, look to have a common structure for each of these activities. Focus on their commonality using the 80 to 20 rule.

Examining these five areas, in addition to creating a more successful business intelligence program, will also address several legislative initiatives affecting the hospitality industry today, namely: industry compliance with data privacy and Safe Harbor legislation with reference to the collection and use of customer data, and Sarbanes-Oxley, legislation mandating transparent financial reporting and accountability compliance for public companies. A careful look at Sarbanes-Oxley may actually help get your business intelligence program funded.

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