



The Value
Proposition –
A proven
investment
opportunity

It is well accepted by business that it is significantly more cost effective to retain existing customers rather than to acquire new customers, and it is also easier to sell more products and services to existing customers than new customers.

Acceptance of this proposition has led companies into a decision process of having to develop customer loyalty programs and then determine how to interrogate the data obtained from these customer loyalty programs to maximize future revenue and profit for the organization. Invariably this has led to organizations accepting that they need to record the information obtained from customer loyalty programs into a data warehouse. The issue which then arises is, having collected the information in the data warehouse how do you effectively interrogate that information in a cost effective way. Until recently, the preferred method was the use of data mining tools. The problem with data mining tools is that they only take a sliver of data and produce outputs in the form of tables, graphs, etc which are put forward as representing the whole of the data or trends in the data.

Compudigm International™ have been aware of the importance of considering more effective tools to interrogate the data warehouse. They have come up with a data visualization system known as *see*POWER™ which, because of the design of the industry specific data warehouse, has the ability to visually interrogate all the data, to zoom into hot or cold spots that can then be further analyzed by drilling down into actual data in a similar way to how data mining tools work.

This feature allows management to interrogate actual numbers and be presented with tables, graphs, etc.

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There are several unique aspects of the industry specific data warehouse designed by Compudigm that complement the data visualization system:

1. The Compudigm data warehouse has been specifically designed for the gaming industry. The focus is on only collecting information that is relevant to increasing revenue and profit. Experience has shown that there is little value in collecting data for its own sake.
2. The data warehouse collects information from existing systems, whether they be polling systems or customer loyalty programs, and therefore the Compudigm data warehouse *see*POWER solution is non-intrusive to casinos' existing back office systems. In development of the warehouse it is not unusual for the integrity of existing data to be brought into question. This has led to Compudigm developing a series of reliable procedures to cleanse data.
3. Using the architecture of Compudigm's data warehouse, each transaction can be progressively shown as a visual output over a 24 hour period for each slot. The data warehouse provides the highest level of granularity as all data from each transaction is stored. There is no reliance on summary data.

In addition to collecting data on customer loyalty programs, *see*POWER has provided significant value to slot operations management. Understanding the profitability of each machine, the profitability of the organization throughout the day, the effectiveness of jackpots, impacts of special events and where loyal and important customers like to play is all now easily available using *see*POWER.

In developing the industry specific warehouse, Compudigm has addressed this need. The industry specific data warehouse allows the *see*POWER data visualization, with the aid of its patented wizard, to interrogate the data in any way management believes appropriate. The system can be set up so regular reports are available to management when they come into work the next morning for the previous 24 hours operations and by use of the wizard, specialized

reports can be easily generated. It should be highlighted that the system has the capacity and is robust enough to enable data to be collected from numerous casino operations. For example, in the case of Harrah's it will integrate information from 21 casinos with over 38,000 slots.

It should also be appreciated that the *see*POWER reports are available the next day. Traditionally, slot analysts have spent several days in analyzing results to come up with less than satisfactory outcomes, by which time these outputs are not necessarily relevant.

The industry specific data warehouse for gaming in its current form is likely to meet at least 90%, and often 100%, of any casino operator's requirements. It has been designed with input from some of the most sophisticated casino operators in the industry.

Typically if a normal data warehouse supplier was commissioned to develop a data warehouse for your company, they would take between 90 - 120 days to interview and determine requirements of the organization. It would then take between 9 and 12 months to convert these agreed requirements into a fully operating system. The issue that companies are confronted with is that what has been defined as requirements 9 months ago may not necessarily be what is required to run the business when the data warehouse is delivered.

The industry specific data warehouse designed by CompuDigm can be installed and operational, complete with data visualization, within six months. Should additional information be required it would fall into two categories:

1. There may be a need to add additional fields of information into the data warehouse - this is easily accommodated; or
2. There may be additional reporting required which is typically capable of being generated from the patented wizard.

*see*POWER also has some predictive modeling capability.

CompuDigm would normally recommend that the casino introduce a customer loyalty program and slots management solution as Phase 1, which in its own right will show an excellent pay back. There are optional extras that enable the customer to extend the solution to cover data visualization of tables, hotels, food & beverage and any other revenue sources so that the total spend of any customer can be tracked visually throughout the enterprise.

The CompuDigm data warehouse methodology and solution is significantly more cost effective than other data warehouse options of similar capabilities

The data warehouse methodology and solution proposed by

CompuDigm is significantly more cost effective than other data warehouse options of similar capabilities, and we are pleased to work with you to assure that this is the case.

Of the total cost of the project, the license fees and installation of the industry specific data warehouse is usually at least 60% of the total. Installation of the data warehouse includes populating the warehouse with the required data, which can include some level of data cleansing.

The use of *see*POWER as the solution to interrogating the database will in its own right provide substantial financial benefits. Typically it will enable target marketing to customers to be carried out in a cost effective way. For example, in the case of Kerry Packer's Crown Casino in Australia, six mailouts per annum to 800,000 customers in their loyalty program was costing them in excess of \$1 million. Through the use of *see*POWER, target marketing to between 30,000 - 50,000 customers obtained similar results. In the case of Crown they elected to spend these savings on additional target marketing programs.

*see*POWER, which shows the profitability of each slot machine over a 24 hour period, enabled Crown to identify under-performing machines and as a result of this their average drop over 2,500 slots increased from \$270 to \$307 per day in the first six months of operation, or \$25 million per annum. In the case of Crown, they are limited by

legislation as to the number of slots they can have. Having all slots performing efficiently becomes essential to maximizing the casino's profit. Given the restrictions on the number of machines and tables at Crown, revenue growth in gaming is mainly generated by driving more traffic through the casino and from intensive micro-management of the facility to generate higher average spends per customer. Furthermore, Crown has developed a highly sophisticated database of around 1,000,000 customers that provides detailed information on each customer's gaming habits and allows highly targeted marketing.

Data visualization also allowed Crown management to better monitor the effectiveness of jackpots and giveaways.

Finally, because Crown was able to monitor what part of the casinos and types of machines the loyal customers preferred to play, and concurrently consider where the customers come from, the offers to loyal customers could be tailored to their "play" preferences.

Clayton Wheeler, Slots Product

Manager of Crown Casino says "seePOWER is a very easy software tool to use - it provides us with instant information about our slot performance right across the floor and delivers dramatic increases in profitability."

In reality some of the benefits identified above have the potential to affect the outcomes in other areas. For example, the placement of a new bank of slots may result in a

substantial improvement in that area but it may have cannibalized turnover from other sections of the casino. It is our belief that the ultimate measure is the average improvement per slot. In the case of Crown Casino, the total Compudigm solution provided a payback of less than two months.

Compudigm are currently working with Harrah's to implement a corporate system, which will monitor the performance of all its casinos using seePOWER. John Boushy, Harrah's Entertainment Senior Vice President of Operations, Products & Services and Chief Information Officer "Compudigm will fully integrate seePOWER with our award winning data warehouse and will access both customer and slot performance information, without replication. As a result, seePOWER will enable Harrah's to more easily determine the most popular slot products for our players by displaying the flow of traffic and revenues across the casino floor. Providing the right slots at the right places to our customers is just one more way we expect to continue to grow our revenues."

The system has been successfully implemented into the Hard Rock Casino in Las Vegas and has shown a three month payback.

Conrad Jupiters (a Park Place Casino) on the Gold Coast in Australia have implemented the slots management customer loyalty program and have now proceeded to install the solution into tables and their hotel.

seePOWER Gaming provides casino operations with a proven business intelligence solution. It is a valuable component to drive your organization's revenue.

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*John Boushy,
Harrah's Entertainment*

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