



Product Outputs

April 2001



Contents

1	INTRODUCTION.....	3
2	seePOWER PROFILER.....	4
2.1	RESULTS PRESENTATION	5
2.2	PROFILE QUERIES	5
2.3	DRILL DOWN	5
2.4	PROFILER WIZARD	6
3	seePOWER VISUALIZER.....	7
3.1	ANIMATION	7
3.2	STILL	7
3.3	ENTIRE CASINO VIEW	9
3.4	DRILL DOWN	9
3.5	VISUALIZER WIZARD	10
4	seePOWER PLANNER.....	11
4.1	MASTER FILES.....	11
4.2	INFORMATION WINDOW	12
4.3	MAP EDITING FUNCTIONS.....	12
4.4	THEMATIC FUNCTIONS.....	12
5	INTERLINKING seePOWER MODULES.....	13



1 Introduction

Compudigm's data visualization solution *seePOWER™* for Gaming consists of three modules: Profiler, Visualizer and Planner:

- Profiler enables qualitative and quantitative analysis of patron behavior.
- Visualizer enables still and animated visualizations of casino usage and operation parameters to be displayed in an easily interpreted format.
- Planner provides the user with the ability to alter and customize casino floor layouts, keeping them current as well as providing a complete history for the casino.

seePOWER™ utilizes a business intelligence user interface that runs on the client's Windows PC. *seePOWER™* builds and requests profiles and visualizations from the database servers. The definitions for profiles and visualizations are saved and can be recalled later for reuse. *seePOWER™* allows users to select the output KPIs, timing of output and type of output. A key feature of this system is the off-line request nature of the overall system

The *seePOWER™* solution delivers unprecedented information and summaries for a wide range of business questions, for example:

- What machines do particular customer groups prefer?
- Which customers played progressive jackpots?
- What impact do shows and concerts have on slot play?
- Which slots have the highest handle during times of peak play?
- What are the popular games, and are enough of them being offered?

seePOWER's™ intuitive visualizations will assist casino operators with optimizing the performance of their slot operation and increase their bottom line.

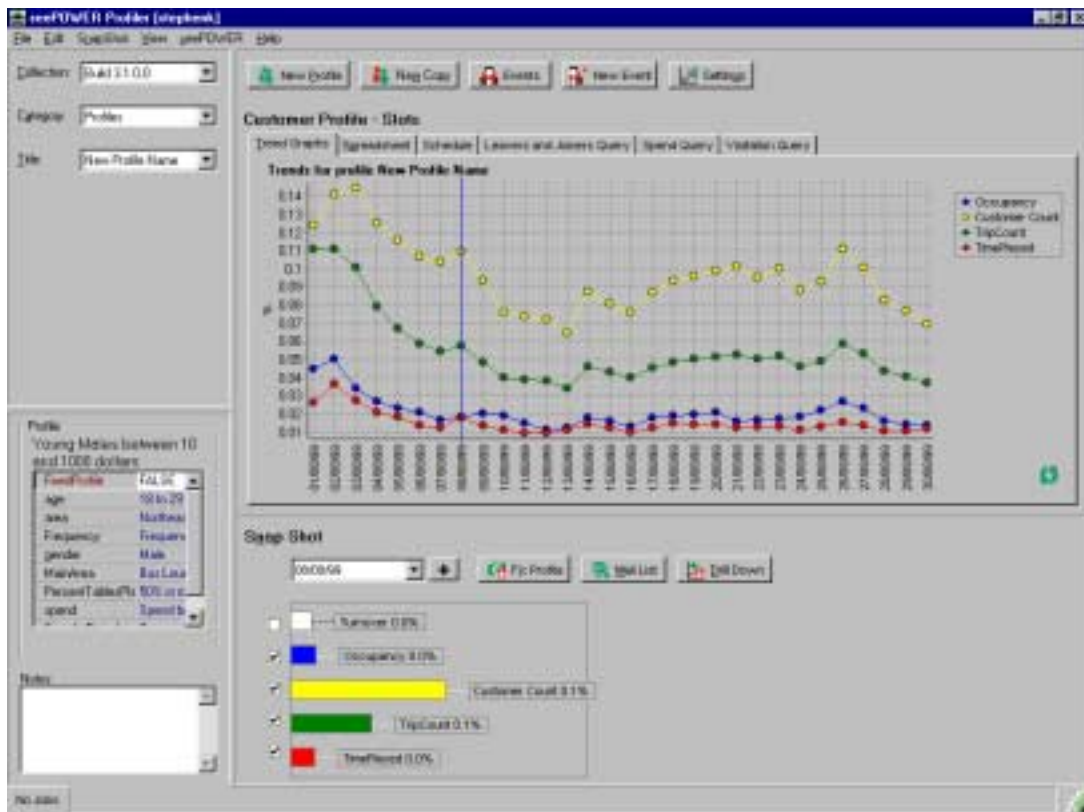
2 seePOWER Profiler

seePOWER™ Profiler provides a powerful system that provides qualitative and quantitative answers to questions regarding promotions, patron visitation and spend.

seePOWER™ Profiler lets you create a specific cross section of your patrons, and ask questions regarding their visitation and spending frequencies, either at a particular point in time, or over some time interval. seePOWER™ Profiler also lets you capture the group of patrons who satisfied the criteria of a particular business question, and then subject that fixed profile to further analysis.

For example, you can find out how a promotion has impacted on a particular patron profile, and get a list of which patrons have modified their visitation and spending behavior since the promotion was run. You can then run queries months later on that same group of people to see whether your promotion had any lasting effect. seePOWER™ Profiler enables you to closely monitor your patrons' behavior and target your marketing more effectively.

When seePOWER™ Profiler is used with seePOWER™ Visualizer, it enables your patrons' profiles to be analyzed in terms of promotion reactions and visitation and spending behavior, both inside and outside the casino.



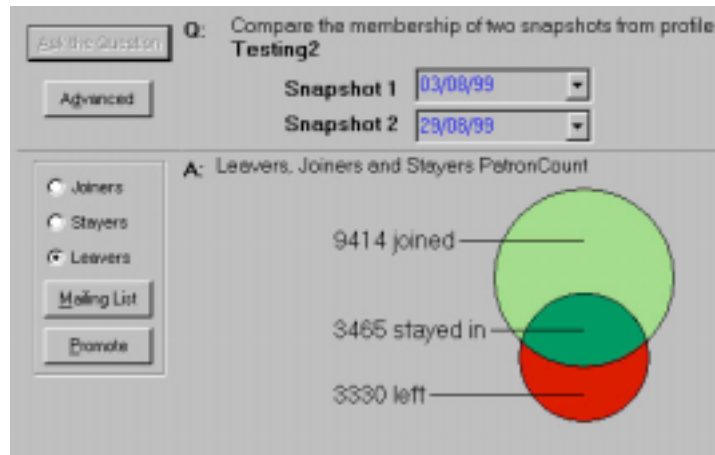
Profiler

2.1 Results Presentation

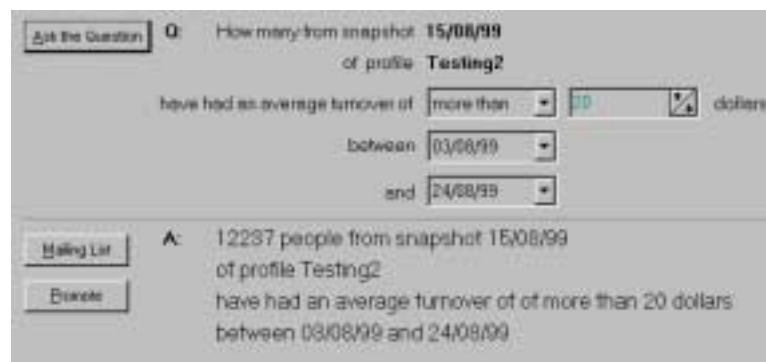
Profiles are displayed as either single or multiple snapshots and can be presented in both a chart and spreadsheet format. The delivered visualization is similar to that of Visualizer (discussed on page 7), although the depth of data available for display is enhanced by the addition of customer information.

2.2 Profile queries

A key feature of seePOWER™ Profiler is the ability to analyze the behavior of the specified profiles over time periods. Examples of the types of queries include Leavers, Stayers, Joiners, Spend and Visitation. Examples of these queries are presented below.



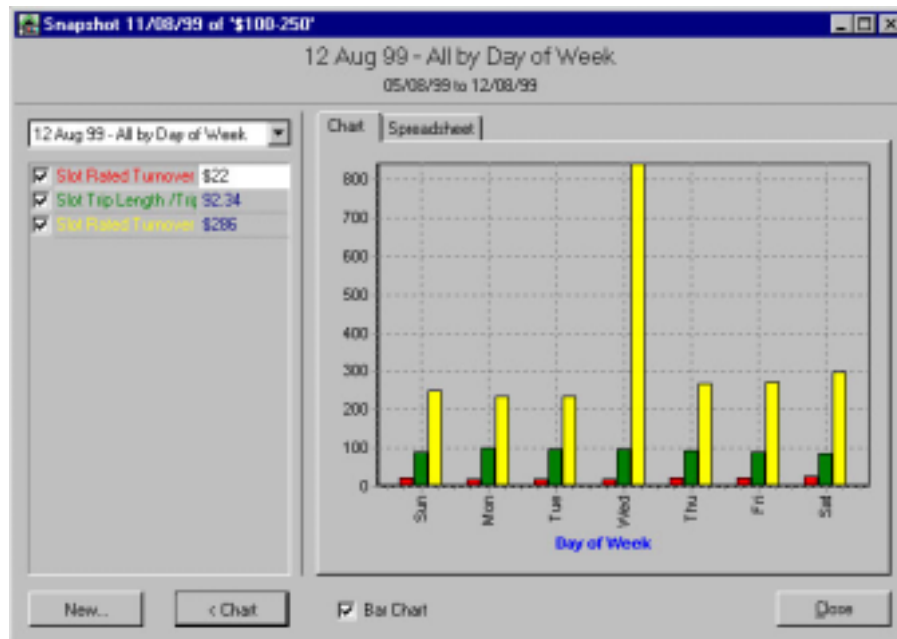
Leavers, Joiners and Stayers Query



Spend Query

2.3 Drill Down

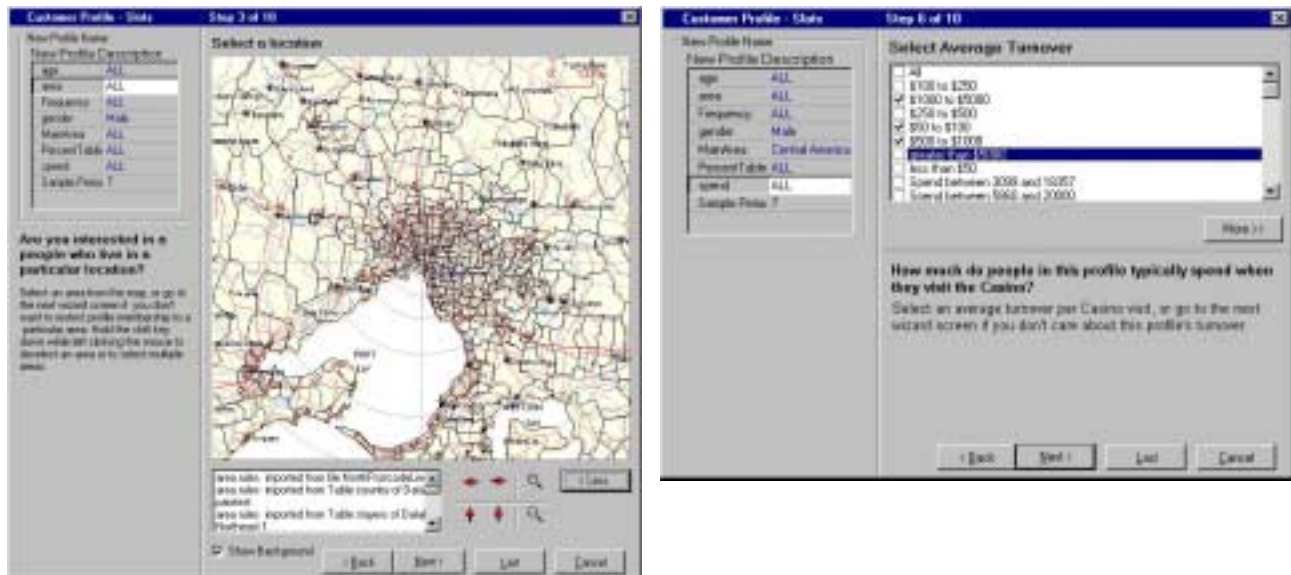
Profiler Drill Down enables detailed data analysis on a single snapshot within the specified profile. Key Performance Indicators (KPIs) can be selected by the user and presented graphically by a variety of parameters (postcode, gender, day of week).



Drill Down

2.4 Profiler Wizard

New profiles are created through the use of a wizard. This wizard asks questions of the user regarding various profile parameters. Once these answers have been provided the new profile is generated. A sample of these questions is shown below.



Profiler Wizard



3 seePOWER Visualizer

seePOWER™ Visualizer allows the user to construct visual images of casino play by selecting a variety of options including the area of interest (within or outside a casino) and individual banks and/or machines. The visualization is then displayed by a user-defined combination of contouring, shading and labelling.

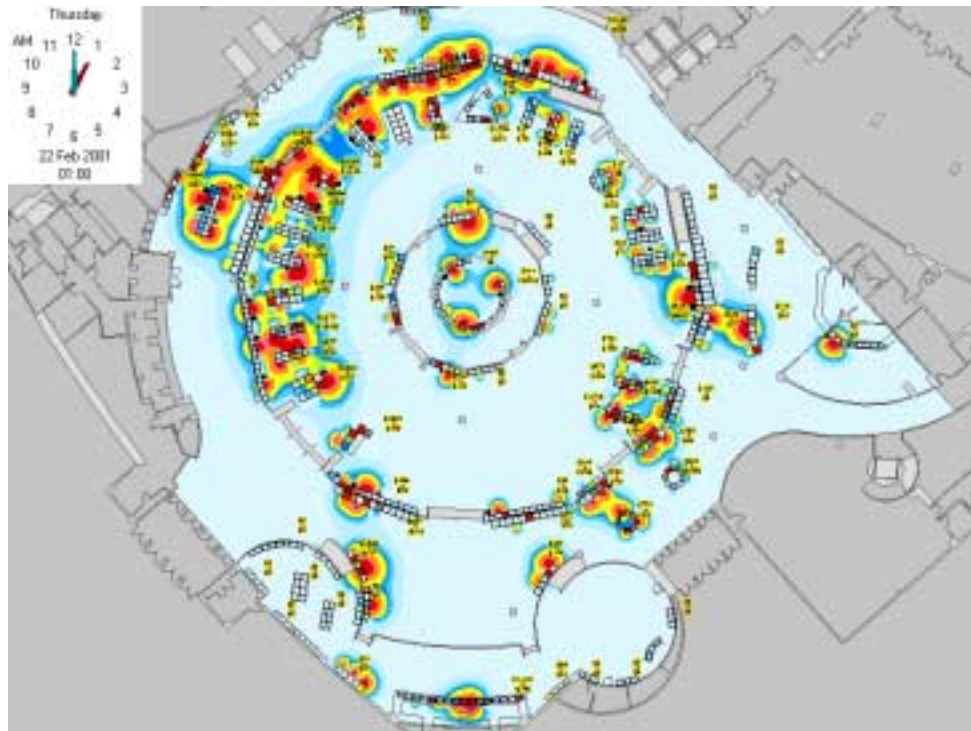
seePOWER™ Visualizer gives the user the choice of creating and viewing still or animated visualizations of slots or gaming tables, with the required KPI contoured either inside or outside the casino. A still visualization provides a summarised picture of specific casino usage and operational parameters. An animated visualization shows the different KPIs over time.

3.1 Animation

Animated Visual Images (AVIs) display large quantities of data over a specified time period. They are built to the specification of the user and delivered in the form of compressed video images. AVIs can be displayed on any modern high quality computer. The animations have play and pause control.

3.2 Still

A still image will often be part of a series of images (e.g. a 3 p.m. slice over a one week period). Still images are also generated from aggregate data (e.g. "What was the average turnover over for a two week period?"). The still image will always include the generation of meta-data describing the parameters used to build the still image.



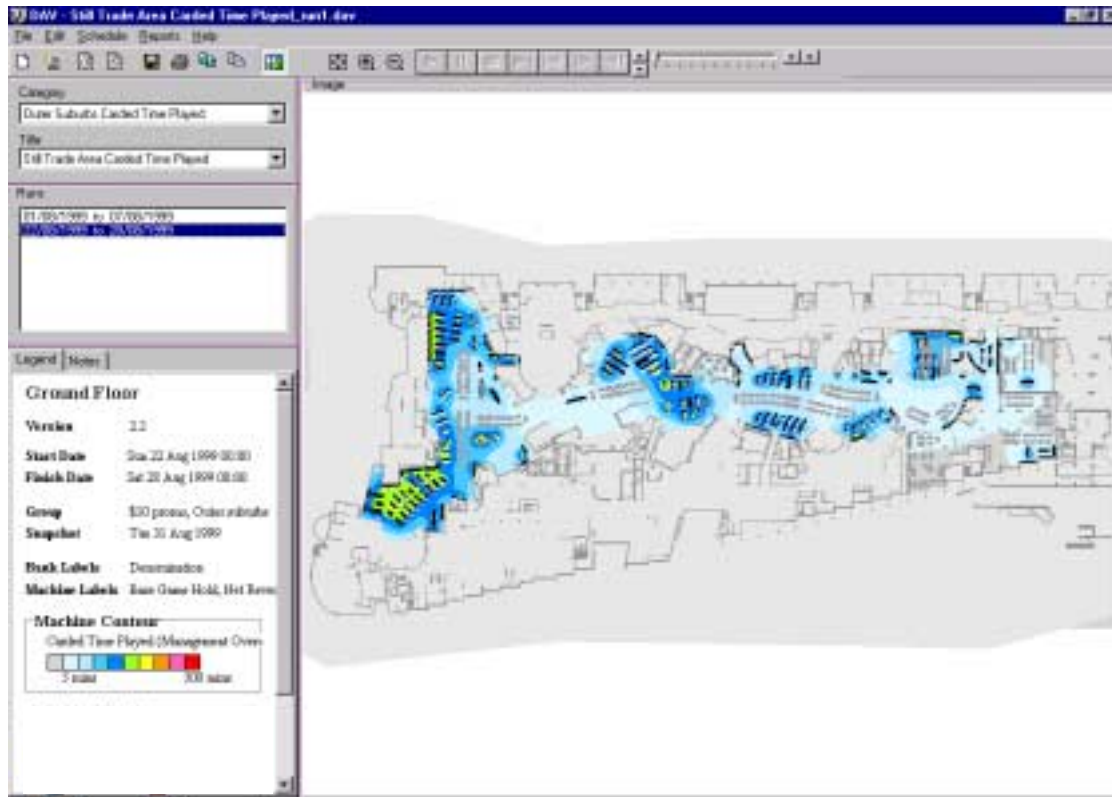
Animated Visual Image – Inside Casino



Still – Inside Casino

3.3 Entire Casino View

Operators can view whole floors to obtain broad patterns of performance and attain a high level of understanding of the performance of various areas across the floor.



Entire Casino View

3.4 Drill Down

seePOWER™ Visualizer has an analysis tool allowing on line querying for numerical information. This *drill down* optimizes the user friendliness, and accessibility of hard performance data of the system. Mouse clicking on the slot machine of interest brings up a drill down window. The window displays a live query on the data for the casino, area, bank of slots or an individual machine. The user can also choose which KPIs to select.

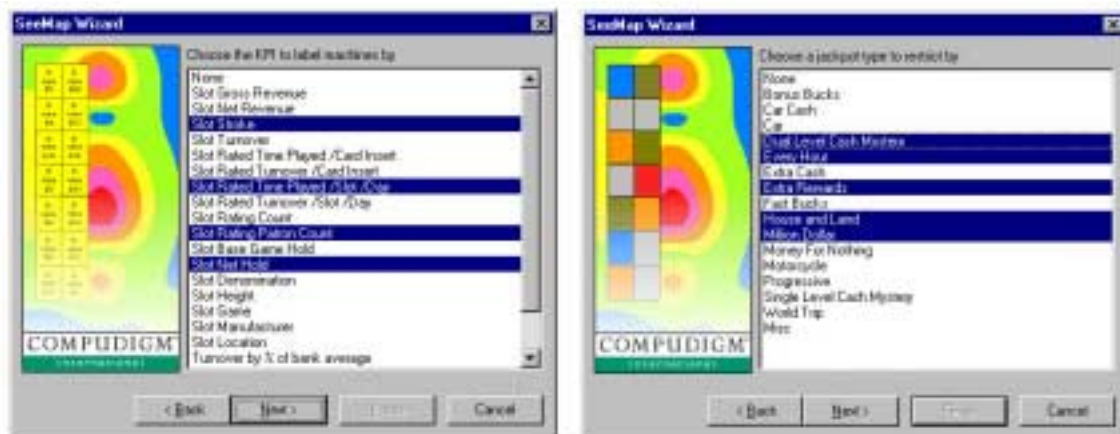
The Drill Down image indicates that the top bank of slots provides an opportunity for improvement. On closer inspection there is a variation between adjacent slots which is significant. A “drill down” on a slot by a mouse click provides a trend plot and summary KPIs. In this instance we have clicked on the last slot in the bank at the back of the room. The Information Panel shows Turnover (Australian terminology) which is equivalent to Handle.



Drill Down

3.5 Visualizer Wizard

New visualizations are undertaken through the use of a wizard. This wizard asks questions of the user regarding various visualization parameters (e.g. casino map, KPI labels, time period). Once these answers have been supplied a new visualization is generated. A sample of these questions is shown below.



Visualizer Wizard

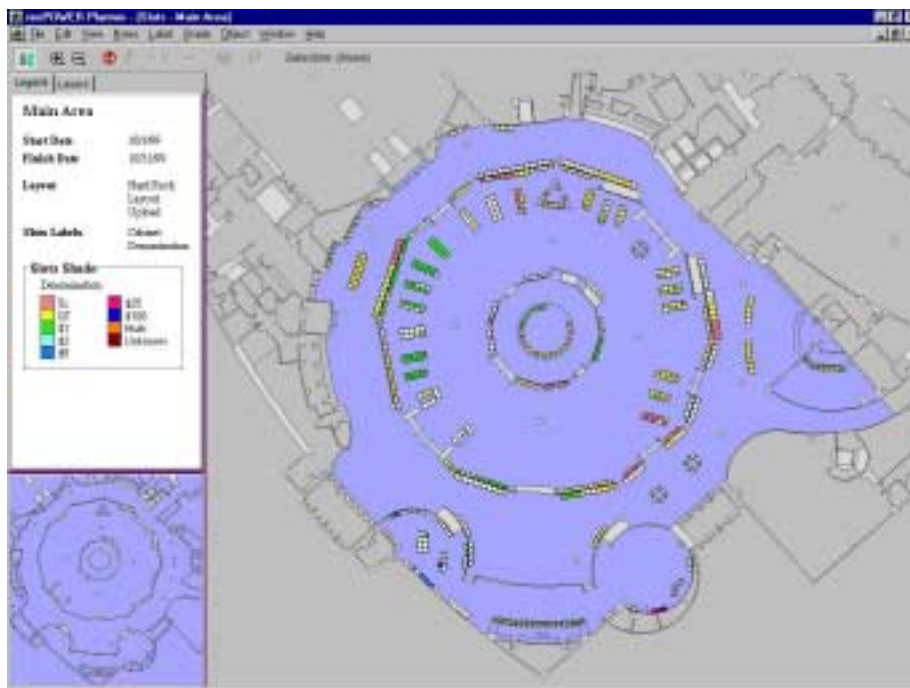
4 seePOWER Planner

seePOWER™ Planner is the floor layout design and management module of seePOWER™ for Gaming. Planner allows the user to alter the current floor layout to suit a particular management strategy. Complete floor layouts can be saved that enable historic layouts to be preserved if these are required for future management strategies.

4.1 Master Files

seePOWER™ Planner uses scenarios to manage floor layouts. A master file is created when the current scenario worked on is implemented on the floor layout.

A master file is a read-only file of the casino floor plan with the slot machines already positioned. A master file can not be edited directly, but can be copied, edited and renamed.



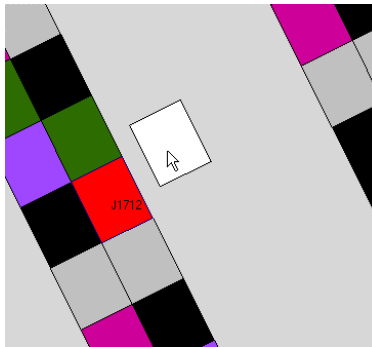
Planner

4.2 Information window

This contains two tabs (Legend/Layer control), which display the Legend (of the current map – showing shading, labelling, map name and date ranges), and the Layer Controls (which determines whether layers such as walls, tables, machines etc, are visible).

4.3 Map editing functions

Map editing functions are available for master files and their copies. These functions allow objects (i.e. machines, tables) to be copied, moved, rotated and pasted on to the map.



Changing slot machine location

4.4 Thematic functions

Thematic functions (e.g. slot machine shading, labelling) are available and allow new thematics to be created or preexisting thematics to be edited. Thematic functions also control how machines are viewed by allowing user defined thematics.

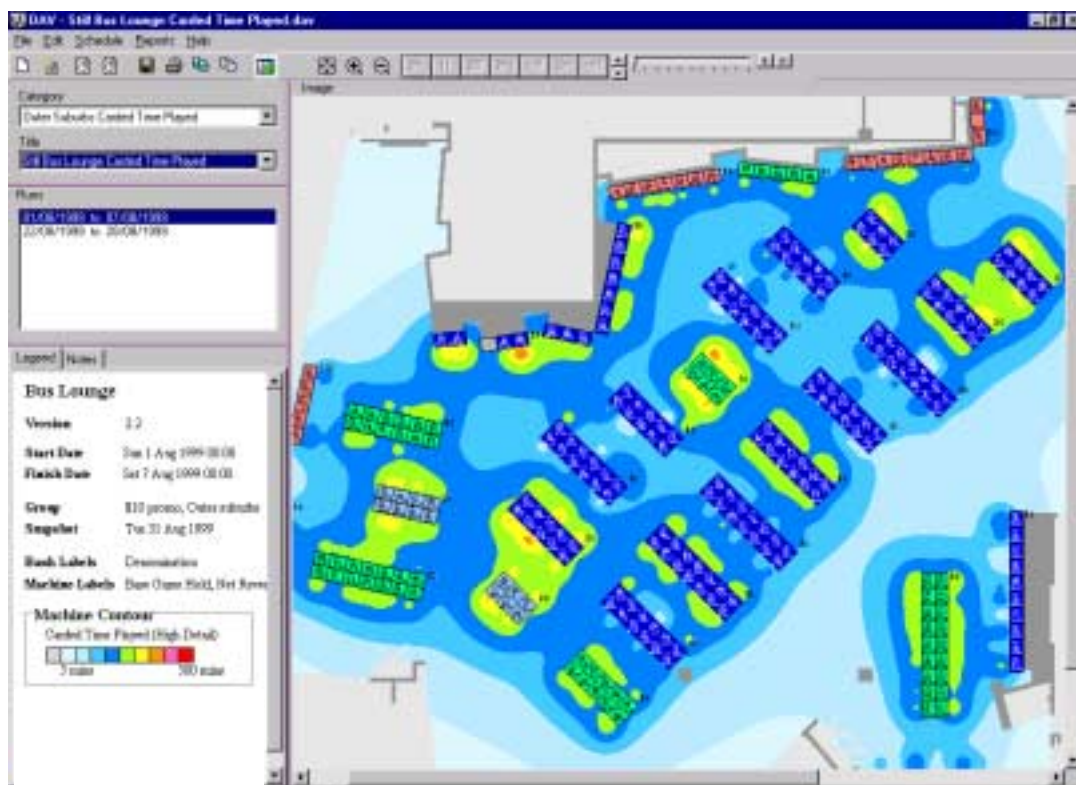
5 Using seePOWER seamlessly

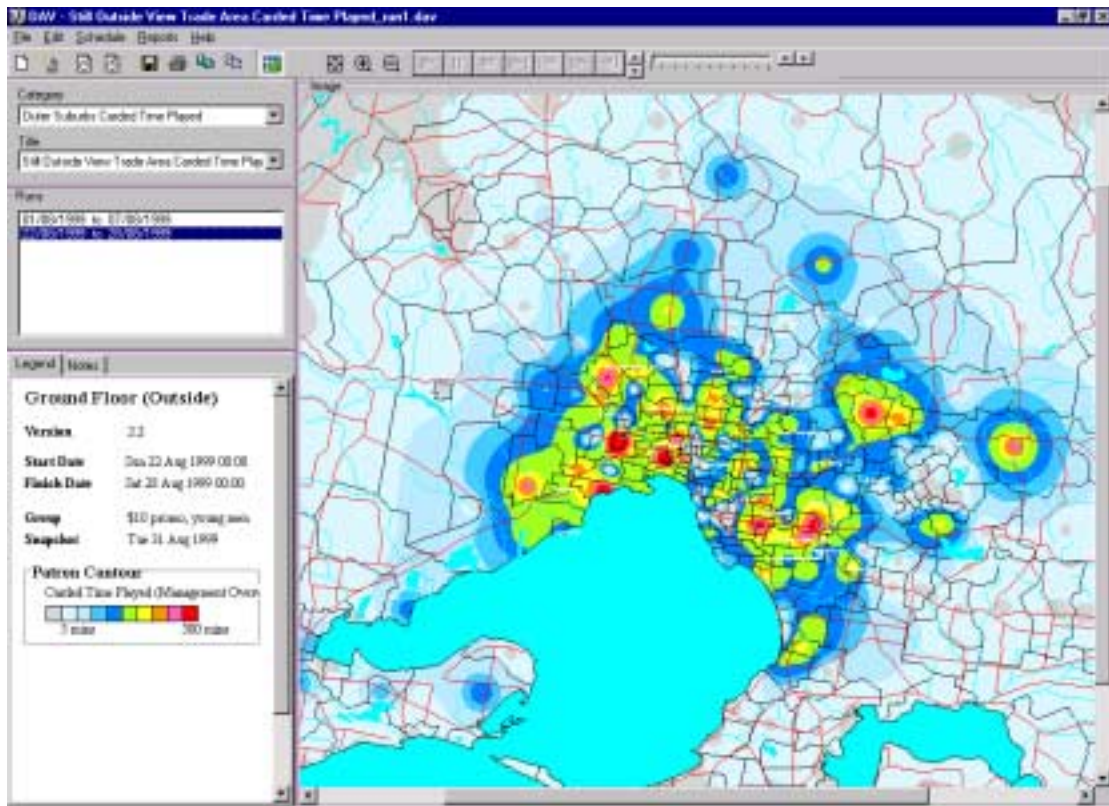
The benefits of seePOWER™ are maximized when the three modules are applied in an interrelated manner. Customer information enables management to visualize where customers reside and to better understand their gaming habits. Understanding the activities of customers, and spatial statistical analysis can be used to identify areas of similar demographics.

Areas of similar demographics and travel time provides marketing information that allows the effectiveness of marketing and promotional programs to be measured. Benchmarking of suburbs, using the geocoded patrons' data and census data, will allow direct marketing to deliver an excellent cost-effective offer to the existing patrons in high client-density areas.

These and similar objectives can be realized by establishing specific patrons from within Profiler and importing these patrons into Visualizer. Visualizations can then be undertaken to establish the gaming behavior of these patrons at specific casino sites and by different time periods and KPIs. Different floor layouts created in Planner can be applied to the patron set to evaluate the impacts of different floor layouts on the playing behavior of the patrons.

The screen shot displayed below illustrates the carded time played in one part of a casino of a particular set of customers, and the second and third screen shots (next page) show where those customers actually reside. The display of where customers reside can be displayed in local (i.e. city, district) or national (i.e. country) scale maps.





Outside Casino - City



Outside Casino - Country