Table Games Revenue Management Best Practices

A survey of 26 table games management teams worldwide

DATA SURVEY SET



WHO COLLECTIVELY MANAGE

6000+ Tables

ACROSS

70+ Casino Properties



By the team at Tangam Systems www.tangamsystems.com

EXECUTIVE SUMMARY

Growth in the casino gaming industry can be observed around the world. Incumbent firms are expanding, new properties are sprouting, and with competition rising; investors demand increased profitability and controls over table games operations. This has led to casino operators starting to take a more formalized approach to measuring and improving table games performance through yield management practices. In the last six years, "*table games yield management*" has crossed a tipping point, having transformed from a 'niche expertise' into a part of the mainstream lexicon of regular performance reporting.

This case study sets out to introduce the yield management cycle for table games and shares procedural best practices. These practices, and the cycle itself, present aggregated information gathered from 26 different table games management teams, who collectively manage over 6000+ tables across 70+ casino properties. Properties included in the survey are located in Macau, the United States, Australia, Canada, Singapore and the United Kingdom.¹

Significant differences were discovered in the effectiveness of operational practices in use. These best practices spanned the areas of data collection, patron demand segmentation, patron profitability modeling and demand forecasting, optimizing the allocation of tables and labour, table pricing, real time demand response, and the use of software tools. In addition to data driven analysis, the management team's operations experience, creativity and experimentation play an important role in driving the synthesis and strategy.

The teams' specific operational practices in each of these areas are presented and discussed in this case study. Furthermore, we were able to classify the sophistication of their methods as either *advanced, intermediate or basic* - depending on the ability to glean insight and drive performance gains. Although the rankings within each area differ significantly, in aggregate approximately 1/3rd of the management teams are advanced in their approach to maximizing table games profits through yield management. To preserve confidentiality and competitive intelligence, this report does not divulge any proprietary operating practices, and presents only publicly known methods employed by multiple management teams.

Owners and management teams can use this survey as a guide to identify opportunities to improve their internal optimization practices. Table games executives can plan the adoption of the appropriate best practices into a roadmap to generate profit growth, with minimal new capital spending.

YIELD MANAGEMENT CYCLE

Maximizing table games performance through 'yield management' is an essential function of any table games management team. It is important to note however, that yield management is not a one-time activity, but a series of activities that are performed in continuous cycles. The activities included in the yield management of table games are illustrated in Figure 1 below.



figure 1 - Key Activities of the Yield Management Cycle

Most table games management teams execute some form of this cycle, although the frequency and sophistication differs substantially among the teams. In the following sections, we will explore several of these activities in depth and look at the use of best practices across a broad selection of 26 management teams in the industry.

DATA COLLECTION

The Yield Management Cycle begins with collecting and aggregating multiple sources of data representing historical game performance, patron demand and the operational decisions tied to them. Of the teams surveyed, we noted substantial disparity in both (a) the quality and (b) the granularity of data collected – factors that impact the effectiveness of their analysis. By investigating each team's practices, we were able to classify the sophistication of their methods as either *advanced, intermediate or basic* – based on the quality of data and its potential to glean insight. Figure 2 below provides a summary of best practices, categorized by sophistication. In the pie chart we illustrate the percentage of management teams in each category.



ADVANCED, 39%

Collect hourly patron head count, table minimum data, and average bets from patron ratings, for each table

Conduct audits and report on the accuracy of collected data

Collect Drop/Win data per table, for each shift or more frequently

Use sensor technology to capture actual wagers and/or actual number of decisions

Record and utilize hotel occupancy data, if relevant

INTERMEDIATE, 23%

Collect hourly patron head count and table minimum data, for each table

Collect and report Win/Drop data per table, for each day

Conduct audits and report on the accuracy of collected data Perform game speed audits

BASIC, 38%

Hourly patron head count for each table

Collect and report Win/Drop data, for each day

figure 2 - Data Collection Best Practices

The top 39% of management teams were classified as advanced. These teams employed sophisticated methods for data aggregation whereby head counts and table betting minimums were combined with (at least) hourly player ratings data. This approach combined multiple sources of information (usually several times each hour) and produced a more accurate estimate of patron wagers – a substantial improvement over standalone headcounts. Many of these *advanced* operators also collected and reported on Drop/Win

Data Collection Continued...

data for each table on a per-shift or hourly basis – a level of granularity that can help uncover insights that would otherwise be impossible to obtain from data that is aggregated or averaged across the entire day or longer time periods.

One particular management team was identified as having the 'category leading' best practice in the area of data collection. This designation was conferred on them by the authors for their use of RFID enabled tables, each of which captured actual wagers every 5 minutes to produce accurate patron wager data at the tables. Another team employed sensors embedded into the tables to accurately track the actual number of game rounds dealt at each table. Other notable teams collected hotel bookings/occupancy data as predictors of patron demand. Two teams utilized measures of patron traffic across the gaming floor as indicative of 'censored patron demand' i.e. - patrons who are willing to play, but cannot find an appropriately priced game (usually lower-limit demand). By identifying and measuring censored patron demand, operators can justify increasing table capacity to capture new revenue streams.

The 23% of management teams classified as *intermediate* collected table minimum data and hourly head counts for each table, but did not overlay this data with wager information from a rating system. These teams also reported on Drop/Win data for each table on a per-day basis. While less thorough than their advanced counterparts, both intermediate and advanced teams understood that data quality and granularity directly impacts the effectiveness of yield management activities and revenue making potential. In recognition of this fact, a majority of the intermediate teams had processes in place to audit and report on the accuracy of data quality. Furthermore, these teams measured game speed either through technology or manual audits, which were then used in staff coaching and/or yield optimization analysis.

The lowest 38% of teams were identified as employing *basic* data collection practices. These operators collected hourly patron head counts, by table or overall. The choice not to segment their patron demand by table minimum significantly limits the ability to effectively manage table spreads and betting limits, and results in missed profits. Operators that do not collect table betting limit information can benefit significantly from increasing the granularity of their data collection; an improvement that would allow them to segment patron demand and subsequently match the table supply to demand.

In order to benefit from effective yield management practices, operators must commit to either intermediate or advanced practices of data collection. Operators are also advised to implement an internal process of auditing and reporting to ensure the accuracy of their data.

ANALYSIS & OPTIMIZATION

Quantitative Analysis S Qualitative Analysis

The analysis and interpretation of data can be separated into two kinds of activities – each of which has a distinct purpose. The first kind is quantitative analysis, which involves applying mathematics and statistics to understand the data and recommend actions. The second kind is qualitative analysis, which delves into the human behavioural drivers behind the data. Where quantitative methods seek insight through mathematics, qualitative methods delve deeper into the *why* and *how* of decision making. Table 1 below provides some examples of the type of questions that each method addresses.

Quantitative Analysis

Identifies table occupancy targets that maximize the per patron profit per game type/limit

Identifies the table games or areas that are performing well and those which are not meeting revenue/profit targets

Determines the loss of profits associated with poor game mix, table spread or pricing decisions

Forecasts the patron demand for the next month, and seeks to match game mix, open hours, betting limits and schedules to patron demand

Specifies changes to the number of floor staff shifts, start times and durations, that can enhance labour allocation

Measures the effectiveness of promotions in achieving its profit objectives

Qualitative Analysis

Describes the business rules that govern the yield management strategy

Identifies new games which have the potential to stimulate demand and grow the top-line; Suggests ways to lure certain patron segments away from the competition

Presents ways to improve upon or capitalize on the popularity of a specific game

Identifies procedures and training programs that can improve customer service, floor staff engagement, and dealing efficiency

Suggests feasible changes to the floor staff shifts/times /durations subject to the labour market, regulatory environment, and union relations

Suggests promotions that may maintain or stimulate patron demand

Having good data, the right software tools, and employing capable analysts collectively drive effective quantitative analysis. On the other hand, effective qualitative analysis is primarily driven by management's experience, intuition, experimentation and creativity. Both quantitative and qualitative activities go hand in hand and are essential to driving table games profitability.

The following sections survey and share best practices with respect to quantitative analysis and optimization. The qualitative aspects exceed the scope of this case study and will be expanded upon in a future article.

QUANTITATIVE ANALYSIS

All of the surveyed operators apply various kinds of quantitative analysis, a majority of which involves pursuing two objectives (among others) –

1 monitoring game performance 2 matching table supply to patron demand

Monitoring game performance involves analyzing outcome metrics such as drop, win, hold, and net contribution, in aggregate as well as normalized (eg: 'per open hour' or 'per table per day'). Trends are identified by making comparisons to outcomes from the previous year or the previous quarter/month or to competitor or market share data. Furthermore, the key outcome metrics are analyzed in conjunction with additional metrics (eg: open hours, table limits, occupancy, average bet, side bet participation rate etc.) to glean insights into what factors influenced the outcomes, and what operational changes might help achieve better outcomes for the next quarter/month. The discussion of game performance analysis practices is beyond the scope of this case study, and will be explored in depth in a future case study.

Attempting to plan table supply (game mix, open hours, and betting limits) to match forecasted patron demand usually consumes substantial analyst and managerial resources. Utilizing software tools to automate large parts (not all) of this process would allow management and analysts to better allocate their time to novel and dynamic concerns, or to the execution of analysis recommendations – matters that call upon experience and creativity, and not rote-computation.

More specifically the following activities are involved in matching table supply to patron demand:

- Create and maintain revenue/profit models for each patron segment, as a factor of table occupancy
- Analyze the effectiveness of table spreads, betting minimums and occupancy, in driving performance gains, for the previous time period
- Segment and forecast hourly patron demand for the upcoming time period
- Determine the hourly optimal table spread and betting limits for the upcoming time period
- Transform the hourly optimal table spread into an actionable roster schedule, subject to:
 (a) business rules, (b) labour constraints, and (c) game capacity constraints

In the following sections we will explore industry best practices in some of these activities.

Segment the Patron Demand Data

A cornerstone of yield management strategy is the segmentation of patron demand data and modeling the profitability for each segment. Among the surveyed teams, there were moderate differences in segmentation strategy. Figure 3 below provides a summary of the best segmenting practices, categorized by sophistication. It must be noted that although the marketing departments identify a substantial number of patron segments to target promotional offers etc., the following is an assessment of segmentation as it pertains to operations strategy.

ADVANCED, 12%

Segment patron demand by game type, betting minimum, and gaming area

Further segment patron demand at greater granularity, such as specific time periods based on predominant customer type (eg. Hong Kong vs. mainland China)

INTERMEDIATE, 46%

Segment patron demand by game type, betting minimum, and gaming area

BASIC, 42%

Segment patron demand by game type only



As seen above, 46% of the teams segmented their patron demand data by game type, gaming area and table minimum. This practice is industry norm and has been classified at an intermediate level.

A few operators (12%), introduced more granularity to their segmentation strategy, based on the specific nature of their patron base. For example, during specific days or time periods, a majority of the patrons may come from specific geographic locations (eg: Hong Kong vs. mainland China), or have a specific demographic profile. Patron demand data from these periods were classified as separate segments, analyzed and appropriate optimization strategies determined. Introducing additional 'granularity' to segmentation can help management teams better understand their patron base, and devise a more targeted yield strategy. We caution however that practices such as these, while conferring deeper insights, require substantially larger data sets, and are often only feasible for large properties.

42% of operators either segment patron demand by game type alone, or fail to employ segmentation strategy altogether. These teams were identified as basic with respect to their patron demand data segmentation practice. Properties employing basic segmentation strategy can benefit greatly from improvements here, as they will confer an increased ability to match table supply to patron demand and maximize overall profit.

figure 3 - Patron Demand Segmentation Best Practices

Create Profitability Models for each Patron Segment

Tied to segmentation, another key pillar of yield management strategy is the development of per-patron profit models for each patron segment, in respect to table occupancy. Equipped with this knowledge, management can then allocate the right game mix and the appropriate number of tables with the corresponding minimums, so as to maximize table games profit as a whole.

It is important to note that although a majority of operators use some form of target utilization, whether per segment or overall, these targets are often set through intuition and defended by anecdotal evidence. It is recommended that utilization targets need a more rigorous process – derived through formulation and defended by data. Although intuitively derived strategy does play an important role in table games management, it is recommended that for management to capture latent revenue opportunities, some of which may be unintuitive, they need to apply a rigorous analysis based on the property specific conditions. Each patron segment has its own unique characteristics, and the impact on profits can be profound. Average bet, play time, game speed, house edge and player seating patterns are amongst a few variables that impact revenue. Gaming taxes, complimentaries, and labour expenses of occupied as well as unoccupied tables, need to be accounted for in order to calculate the profit per patron. A previously published article titled "Baccarat Revenue Management" from Tangam Systems provides an in depth analysis of the methods involved in calculating and optimizing the profit per patron.

Figure 4 below presents industry practices pertaining to segment specific profitability modeling, as part of an overarching optimization strategy.



ADVANCED, 42%

Generate profitability models for each patron segment, respective to table occupancy

Derive table utilization targets from profitability models

BASIC, 58%

Set table utilization targets by intuition or qualitative observations

42% of the management teams created and maintained revenue/profit models for each patron segment. These profit models were used to determine optimal occupancy levels for each patron segment. The

figure 4 - Profitability Modeling Best Practices

models also help determine the most profitable table spread and betting minimums configuration under operational or capacity constraints.

Forecast Patron demand

Payroll and human capital investment usually marks the biggest portion of table games expenditure. With scheduling and rostering driven by anticipated patron demand and its corresponding profit potential, the need for accurate forecasts is obvious. Once historical patron demand is aggregated from multiple sources and segmented in a manner that makes sense for the business, the logical next step is to attempt to forecast demand hourly for the upcoming time period. Figure 5 below summarizes the best practices in forecasting patron demand, and the percentage of management teams in each category.

ADVANCED, 54%

Employ data-driven and analytical method for forecasting patron demand

Incorporate patron demand in the previous 4-8 weeks, adjustments for special events, demand in the previous year, and additional data points as applicable to the business, as inputs to the forecast model

Produce a multi-tiered forecast model that includes both, a minimum and a most likely forecast

BASIC, 46%

Make adjustments to the spread based on anecdotal feedback from gaming shift managers and secondary confirmation using table performance and utilization reports



figure 5 - Patron Demand Forecasting Best Practices

The operators classified as *advanced* utilized a data driven, analytical approach to forecast patron demand. The task was typically performed by an analyst or a gaming manager armed with the appropriate tools and training. While specific forecast models may vary, the most commonly used inputs in order of priority and popularity were (1) patron demand in the previous 4-8 weeks, (2) special event data such as holidays or conventions, (3) patron demand in the previous year for the same upcoming time period, and (4) hotel occupancy for the upcoming period (if applicable). The most commonly used forecast models were derivations of regression analysis with overlaid seasonality effects. Some management teams used a two tiered forecast model that included both, a minimum forecast and a most likely forecast. The minimum forecast is a conservative baseline that is used to schedule full time floor staff, while the most likely forecast is used to layer part-time floor staff on top of the conservative baseline.

Approaches classified as being basic did not have an analytical approach to forecasting patron demand. For most of these properties, the approach involved aggregating anecdotal feedback from casino shift managers on the 'busyness' of particular games and areas. Win/Drop and utilization data were sometimes employed for confirmation. 'Eye balled' adjustments were then made to the table spread either by the table games director or her/his assistant on an ad-hoc basis.

Management teams employing basic approaches can benefit significantly from the implementation of a quantitative analysis based approach to forecasting patron demand. Doing so will help them better match table supply to patron demand, which helps offer a more comfortable gaming experience for patrons, and capture profits that are currently being 'left on the table'.

Optimize the Spread, Table Minimums, and Schedules

Combining hourly patron forecast with profit-optimized utilization models allows analysts to determine the right mix of games to offer, the number of tables to open and what minimums to set them at. The analyst then needs to apply operational constraints in order to arrive at table spreads and schedules that the operations team can execute and that maximizes overall profit. Examples of operational constraints that the spread must respect include:

- Predetermined staff shift start times and shift durations
- Shifts are implemented for groups of days, not just individually for each day
- Tables need to be opened in clusters of 4 to 6 tables to respect the dealer break or swing rotations, dealer-to-supervisor ratios, and pit formations

Furthermore, during time periods when patron demand is very high or when there is a staff shortage, the desired optimal number of tables can exceed the available number of tables / staff. In these scenarios, analysts must:

- Evaluate the expected opportunity cost under different configurations of spreads and betting limits
- Allocate the appropriate number of tables to the most valuable patron segments, so as to maximize
 overall table games profit

Determining the optimal game mix, spread and table minimums configuration that respects and optimizes across all these constraints is a complex computational task, with thousands of possible combinations – and is simply impossible without the aid of computerized algorithms. The top 23% of management teams classified as advanced use specialized software tools (with varying power) to assist with this activity. A specialized optimization software automatically simulates through the thousands of combinations of spread/limit configurations, under the specified constraints, and identifies the most profitable spread. The selection of appropriate software solutions is addressed in a later section of this case study.

31% of the management teams categorized as intermediate, use spreadsheets to assist with identifying a feasible spread. Typically an analyst works with the spreadsheet, performs smoothing, averaging and tweaking. In this manner the analyst estimates a 'workable' spread that respects operational constraints. A

shortcoming of this manual approach is that it is extremely time consuming, and the analyst's decisions may often be sub-optimal, or may be optimized with the wrong objective function, thus leaving 'money' on the table. This shortcoming can be overcome by simply investing in the appropriate optimization software tool that has the capability to work with a table games profit model and operational constraints, and which simulates through thousands of combinations of decisions in order to maximize an objective function – namely overall table games profit.

Figure 6 below summarizes the best practices in determining the spreads, table minimums and schedules, and the percentage of management teams in each category.



ADVANCED, 23%	INTERMEDIATE, 31%	BASIC, 46%
 Demand is analyzed and schedules are adjusted bi-weekly or monthly Specialized software tools are used to determine the optimal mix/spread quantitatively Shifts have 6 or more start times and each start time includes shifts of varying durations The optimal configuration of shift start times are determined by quantitative analysis	Demand is analyzed and schedules are adjusted monthly or quarterly Spreadsheets and 'smoothing' or 'eye-balling' are used to determine the spread Shifts have 6 or more start times The configuration of start times are determined by 'eye-balling' the patron demand charts	Schedules are adjusted quarterly or less frequently Spreadsheets and 'smoothing' or 'eye-balling' are used to determine the spread Shifts have 3 to 5 start times reflecting the day, swing and grave periods

figure 6 - Spread Planning Best Practices

Labour flexibility is an important operational constraint in the optimization of the table spreads and schedules. For instance, teams classified as employing basic practices have limited staff flexibility, for example; three 8-hour shifts corresponding to three specific start times. *Advanced* teams, by comparison, are less constrained, having more than six start times, overlapping shifts, and shifts of varying durations (4 to 10 hours). Some casinos are able to change their schedules monthly or weekly, while others have less flexibility, scheduling once per quarter, or less frequently. It is important to note that labour flexibility is often governed by labour union rules, local labour laws, and labour market competition, and is partly outside the realm of management control.

CREATE & EXECUTE THE PLAN

After the management team, in conjunction with analysts, generates a plan of action, the execution of the plan involves the diligent application of specific duties across all levels of the organization – from analysts/ schedulers, to floor staff. The next sections delve deeper into this area.

REAL TIME DEMAND RESPONSE

Due to the dynamic nature of patron activity on the table games floor, forecast models cannot be acutely accurate in their prediction of hourly patron demand. This means that shift and pit managers will always need to adjust spreads and table minimums in real time, as unforeseen patron demand fluctuations or labour constraints arise.

At the onset of a new shift, gaming managers compare the pre-planned schedule to the present situation on the gaming floor and available labour force (in case there is a shortage). A game or area that is experiencing high patron demand is often allocated additional dealers and supervisors; staff that were previously assigned to another segment. In addition to the dynamic opening or closing of tables, pit managers are also required to change table minimums as patron demand varies throughout the day. These 'demand response' decisions of which tables to open and close in real time, and which betting limits to change, must be performed with the intention of maximizing overall profits across the entire gaming floor. This requires the gaming manager to understand segmental profit models and to rapidly assess the incremental value / opportunity cost of decisions.

The use of appropriate processes and tools plays an integral part in effective execution of a real time demand response strategy. An effective tool must include; decision support, performance measurement, and a system of accountability. Continuous training and cultivation of a data-driven culture will ensure that staff make appropriate, and defendable, real-time decisions.

Figure 7 below shows some best practices with respect to real time demand response.



Real time demand response is the final layer of yield management, and must be built on a good foundation of effective planning by the management team. In markets where demand is volatile (Eg. destination/ tourist markets, event driven businesses), applying an effective demand response strategy is crucial to increasing profit.

38

USE OF SOFTWARE TOOLS

As indicated throughout this case study, the use of appropriate software tools can lend substantial support to the various stages of the yield management cycle. In planning activities, yield management software tools allow management to dramatically increase the speed and scope of data aggregation and quantitative number crunching. Automation and tools enable analysts and management to focus their experience and creativity on understanding the why's and how's (qualitative analysis), and on the execution of initiatives. On the live (real-time) side, software tools provide decision support and data driven recommendations to floor staff, empowering them to make good, defendable, decisions. Figure 8 below illustrates the use of software tools among the 26 management teams.



ADVANCED, 35%

Dynamic dashboards with key performance indicators

Optimization software to quantitatively determine optimal spreads subject to operational constraints, and to simulate 'what-if' scenarios

Generic business intelligence platform for custom reporting

Decisions support software for real time demand response activities

INTERMEDIATE, 23%

Static historical reports in spreadsheet or document format

Spreadsheets or BI scripts to forecast demand and approximate spreads

Generic business intelligence platform for custom reporting

Spreadsheets with 'rules-of-thumb' for real-time demand response activities

BASIC, 42%

Static historical reports in spreadsheet or document format

Spreadsheets to forecast patron demand and approximate spreads

Operators classified as advanced utilized specialized table games yield management software to aggregate multiple sources of data, forecast patron demand, and to automatically determine the optimal game mix, table spreads and betting limits, all with respect to operational constraints. Furthermore, some of these operators employed software dashboards that dynamically updated and displayed key performance metrics (number of tables open, pricing/utilization issues, game speed etc.) Amongst the most capable teams, every member of the organization, from executive management to floor staff, had access to operational and performance metrics most relevant to them.

Operators in the *intermediate* category utilize generic business intelligence platforms to forecast demand and approximate the optimal spreads. Smoothing techniques are used (e.g.: in 4-hour segments) to match table spreads to demand curves. Reports (spreadsheets or Doc/PDF) based on historical table utilization data are generated for review and discussion by the teams. Some of these operators employ standardized spreadsheets or rule-of-thumb cards for floor staff to use for real-time decision support.

Teams classified as employing *basic* practices relied entirely on spreadsheet software for all their analysis activities. Properties employing basic or intermediate software solutions are advised to explore tools which can automate and enhance several aspects of their quantitative analysis, as the time, experience and creativity of analysts and management can be better directed towards qualitative approaches and high-level revenue management strategy.

ORGANIZATION CULTURE

Although this case study shares the specific techniques and tools that constitute best practices in the industry, what is equally important is the culture and attitude of the management involved. Table games executives that look to measurement and data to drive decision making tend to influence their staff to adopt a similar mindset. This mindset can often manifest into very different organizational practices depending on personal philosophies.

CASE A

For example, one operator from this survey, classified as *advanced* in several aspects of the yield management cycle, employed finely tuned and centrally controlled practices for analyzing game performance and adjusting the table spreads/ limits on a bi-weekly basis. In this command center style operation, shift and pit managers were provided relatively less decision authority, training or tools to make real-time demand response decisions. The responsibility and power mostly resided with senior management working in tandem with a team of analysts who were equipped with optimization tools.

CASE B

In contrast, another operator, that was also classified as *advanced* in most areas, employed a more decentralized approach to managing the table spreads and limits. The floor managers were empowered with extensive training, decision support software and the authority to perform demand response activities. Pit and shift managers were entrusted to decide which tables to open and at what limits depending on real-time and projected patron demand conditions across the entire gaming floor. All such real-time decisions by floor staff were tracked and performance reports were generated weekly. The senior management team reviewed these reports regularly and provided coaching to specific gaming managers as needed. Both operators had outperformed their respective local competitors in the past two years (in year-on-year revenue and profit growth); and both can be considered to be successful in applying yield management practices, despite having contrasting operating styles.

Revenue management is only partly about analyzing data. Sense-making and decision-making are even more about constructing a picture of how the business and the world around it works. This is not the area of analysis, but of synthesis². The executive's operations experience, creativity and experimentation drive the synthesis and strategy. Both aspects of decision making, data driven analysis coupled with synthesis/ strategy, go hand in hand. Each needs the complementary influence of the other, to succeed to its full potential.

CONCLUSIONS

In the last six years, "table games optimization" has crossed a tipping point, evolving from a 'niche expertise' into a part of the mainstream lexicon of regular performance reporting. Maximizing table games profits through the application of yield management practices seems to be on every table games executive's agenda.

This case study examined table games optimization best practices among a survey base of 26 table games management teams, collectively managing 6000+ tables across 70+ casino properties. Significant differences were discovered in the effectiveness of operational practices in use. These best practices spanned the areas of data collection, patron profitability modeling and demand forecasting, optimizing the allocation of tables and labour, table pricing, real time demand response, and the use of software tools. By investigating each team's practices, we were able to classify the sophistication of their methods as either *advanced, intermediate or basic* - based on the ability to glean insight and drive performance gains.

Approximately 1/3rd of the management teams are advanced in their approach to maximizing table games profits through yield management. Given the fast adoption of formalized yield management practices within the table games industry over the past 6 years, the authors estimate that by 2016 a majority of management teams worldwide will employ formalized, quantitatively driven, yield management practices.

Owners and management teams can use this survey as a guide to identify opportunities to improve their internal optimization practices. Table games executives can plan the adoption of the appropriate best practices and/or software into a roadmap to generate profit growth, with minimal new capital spending.

An upcoming case study from Tangam will address another important area of table games revenue management - the metrics that management teams track/utilize to measure game performance and their underlying drivers.

If the findings in this report make you curious about where your operation should be in a year's time, or if you would like to share or discuss best practices, we invite you to contact the authors at info@tangamsystems.com

¹ Amongst the 26 management teams; 6 teams are 'large' – each managing over 500+ tables; 10 are 'medium' sized – each managing between 75 and 150 tables; and each of the 10 remaining teams are 'small' – operating properties between 20 and 75 tables.

² "Measurement Drives Behavior", Performance Leadership Series, by Frank Buytendijk



ABOUT TANGAM SYSTEMS

Tangam Systems develops business intelligence software that helps casinos of all sizes enhance their table games business in order to increase profits, efficiency and provide a better gaming experience for players. Our flagship product – Table Games Yield Management (TYM) – is a breakthrough solution that changes the way casinos use data. TYM automatically analyzes headcount and gaming data and then provides intuitive visualizations, predictive analytics and actionable recommendations to align your game mix, spread and pricing with actual player demand in order to maximize your table games profit.

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