



Risk Management and Sports Betting: Optimizing Risk and Profitability

Sports Betting has become a huge business in Europe, Asia, and is poised to expand the U.S. market. Regulatory frameworks contribute to the integrity and sustainability of the market. However, in Sports Betting more than any other gaming sector, the integrity and a sustainable approach to building the market depend on the full support, cooperation, and competence of the operators themselves.

An effective Sports Betting Solution addresses the needs of a market that depends upon the Operator's ability to manage risk; along with creating the Optimal Player Experience. The material question is: How can a sports betting operator limit bets from unprofitable players without introducing unnecessary restrictions on the profitable players and without losing access to the 'expert' market knowledge gained from studying the bets of unprofitable players? Security is the Key to an Optimal Sports Betting Solution.

To remain competitive, sports betting operators are offering ever-more events and increasingly exotic bets at enticing odds. At the same time, operators are struggling to manage risk and defend their profits against the expertise of a growing number of well-informed and sophisticated players. Failure to optimize risk management has two likely outcomes, both of which result in lower overall profits:

- Too restrictive: set bet limits too low, or be too aggressive in discriminating against sophisticated players, and you run the risk of eliminating both unprofitable and profitable players – and that means lower profits.
- Too generous: set bet limits too high, or be too encouraging to sophisticated players, and you'll allow successful players to stake – and win – significantly higher amounts than losing players. You will also attract a disproportionate amount of unprofitable players. Either way, the result is lower profits.

The sports betting industry is in constant development, driven by changes in technology, product development, access to information and player behaviour. The risk management process must constantly evolve to keep pace with these changes or otherwise erode operator profit margins. It is a challenge to stay competitive as both operators and players act on a truly global basis. The Internet provides almost universal market access to competitors and allows them to make instant comparisons between operators. The most popular events will generate countless 'me too' bet offers and the player is free to choose the best odds he can find.

To remain competitive, sports betting operators must offer an increasing number of events. Often, these 'extra' events generate a smaller volume of publicly available information, and that gives the informed player a real advantage. More exotic bet offers, such as whether a specific footballer will be booked during a game, can invite uncertainty about the integrity of the sport in question.

Professional players constantly seek new ways to take advantage of both imperfections in odds compiling and the availability of better information. Channels like Twitter and Facebook provide new, fast ways of acquiring and sharing information – all of which makes it harder for traders to stay ahead. The nature of the Internet creates 24/7 demand for sports bets, which means that operators are having to restructure

their businesses to provide risk management resources around the clock.

Live betting is the fastest growing segment of the gaming industry and today typically comprises around 50% of total revenue for a European sports betting operator. The rapid growth of Live betting has created new challenges, particularly in the areas of real-time probability and information. And increasingly, the market is being driven by the growth in ownership and use of smart phones. Indeed, the placement of bets via smart phone is now the fastest-growing channel in the sector. The downside is that smart phones create a disadvantage for operators by allowing players far better access to real-time information.

Risk Management starts with answering two key questions

- 1 *Who wants to bet?*
- 2 *What is he betting on?*

Both are equally important from a risk management perspective. The trader must have an in-depth knowledge of his customers in order to make the right trading decisions and to extract the best information possible from every bet. But he must also consider what the event is, what information is available, and what is the associated risk.

The trader must start by making a judgment on the person looking to place a bet. If a player has a long history with the operator, it is relatively simple to categorize the player against a risk profile, i.e., is he a Normal customer, a Winning customer or a VIP customer? If the customer is relatively new, the judgment becomes far harder. Sometimes there are reliable clues, for example when a new player is placing large stakes at high prices and has signed-up from a country outside the operator's key markets. In this scenario, the player is likely to be a winner. Usually, though, the clues are less obvious, the judgment-calls much tougher to make, and the trader will need to rely on the best risk management tools. When an operator believes 'wise' money is being staked on an event, the right course of action is to use that information and cut the price. A key advantage of outsourcing trading to a third-party supplier handling several operators is that this kind of 'wise' betting information will be shared among the operators.

Different events carry different risk assessments. Factors that an operator should consider are:

- The quality of the odds compiler
- Is it a high or low profile event, and how much information is available in the public domain?
- The difference in impact, for example, of an injured participant, in sports such as football (where the difference might be minimal) or tennis (where it is likely to be critical) could be significant.
- What sources of information are being used to price Live betting events? These factors matter because the operator may be at a disadvantage in terms of access to other information. Operators should also consider the following:
- Is the team motivated to perform? This question becomes most compelling in the latter part of a league championship or competition.

- Is the outcome of significant importance? For example, who takes the first throw-in during a football match is unlikely to determine the final result of the game.

These factors also touch upon the difficult issue of integrity in sports.

A trader's reaction to a bet depends entirely on who is betting and what they want to bet on. Each time a player places a bet there is an opportunity for the sports betting operator to acquire customer knowledge and form an opinion on whether the player will have a positive or negative long-term impact on the margin. By comparing a new player's bets with historical betting patterns from existing players (who are known to belong to a particular segment), it is possible with advanced algorithms to predict a new player's future profitability at a relatively early stage of his betting career.

There are a number of tools and techniques the sports betting operator can use in order to segment new players. For example:

- Comparing a player's betting pattern with that of known customers
- Comparing the operator's own odds with other bookmakers at the time the bet is placed

Once a player has been categorized, individual risk limits are applied, reflecting the likelihood of the player's long-term profitability. The trading philosophy should be to allow an uncategorized player a relatively generous stake but limit players who show clear signs of being long-term winners. It's important not to draw conclusions too fast, as that runs the risk of missing out on some of the more profitable customers. In markets where the operator is not active, the standard limit should be set lower to reflect the fact that winning customers are likely to be over-represented.

In addition to gaining an in-depth knowledge of the player, implementing risk limits and understanding the risk level on the event, the trader needs quick and proactive support and intervention from back-office systems designed to identify and act upon unwanted betting patterns or other important new information.

There is a wide range of tools and services essential to the needs of the operator. For Live betting, an operator needs services to deliver real-time information beyond that provided by broadcasters. There are excellent services available for conducting IP searches (or to provide even more granular identification techniques) to aid with the detection of multiple account holders. Realistically though, most tools will be developed in-house in a close collaboration between traders and developers. The trader needs tools powerful enough to extract key, actionable information from the kind of data that would not usually lead to any action.

A trader needs detailed information on instances of very high stakes placed by players from the normal customer segment, but also needs information relating to aggregated risk and on all bets placed by sophisticated players. A trader needs tools to tell him if a new player's betting pattern correlates with that of known winning customers.

The trader needs to know if the operator is offering arbitrage (for any reason) against other bookmakers. It's a long list, but the importance of having proven, intelligent and effective back-office tools cannot be over-emphasized.

For each sport and league, the system must set a risk limit in order

to define how much any individual operator can risk on a single outcome. This will determine the maximum amount a player can win on any event. If a player prefers a higher risk, this can be actioned after manual approval by a trader.

When a limit is reached, the operator has three options. The option chosen depends upon the operator's risk policy and judgment of the specific situation.

The operator may decide to:

- adjust the odds
- take on a larger risk

In rare cases the operator may decide to:

- hedge some of the risk
- close the offer and accept no more bets

Compliance to rules and regulations

The compliance officer's role is to make sure the operator complies with internal and external rules and regulations. Externally, he or she acts as the point of contact for regulators, independent betting adjudicators and security associations working closely with sports organizations. Internally, the role is a cross-departmental function with responsibility for ensuring that all parts of the organization comply with internal rules and external service level agreements. The department acts as an advisor in instances that have escalated in importance due to their potential impact on the business. An effective compliance department ensures that operators have a quality control function that can be relied upon to provide customers with the best possible advice.

Concluding & Summary

Successful Risk Management is crucial for the success of a Sports Book. Along with sustained business growth, the bookmaker's ability to effectively manage risk is the most important factor in determining an operator's profitability and long-term success.

Efficient risk management is dependent upon (1) segmentation of the players based on knowledge gained from customer intelligence, (2) understanding of the true risks associated with the event the player wants to bet on and (3) the back office tools available to the trader.

The final decision to accept a larger bet will always be taken by the trader based on personal judgment, experience and compliance to risk policies

The trader depends upon support from IT based tools and from risk management processes in order to manage risk for large number events. However, a fully automated system can't take extraneous information into account and, consequently, the most important decisions should be based on the personal judgement of experienced traders, not on systems that have been developed purely to optimize profitability.

Effective risk management and the integrity of the industry are based on transparency and the ability to identify who the player is. Player accounts and player cards are necessary to provide that. In the retail channel, players are most often anonymous. To implement player cards in the retail channel and make them mandatory for sports betting would help the lottery in performing effective risk management, and help the industry preserve the integrity of sports betting. ♦

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