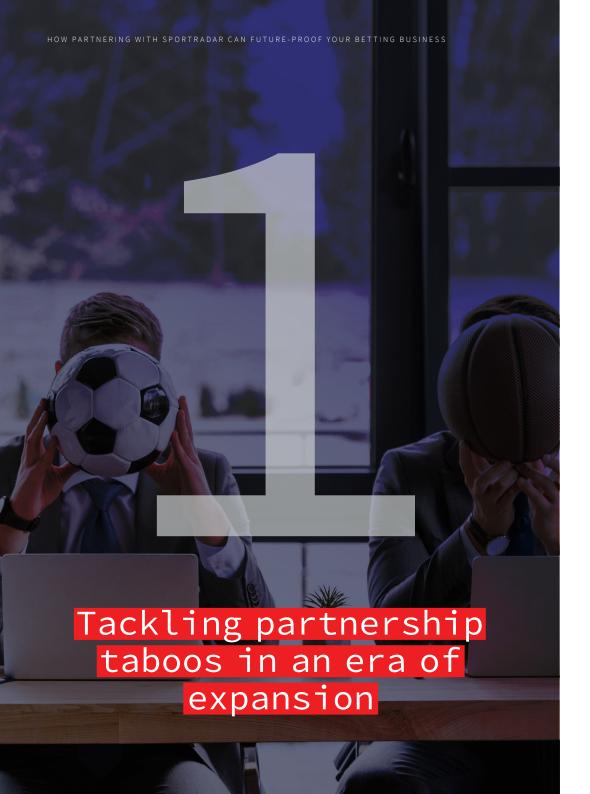


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The value of the global sports betting market is projected to grow annually by between approximately 8.5% and 11% from 2020 through to 2024, with the sector expected to expand by between \$139.5bn and \$144.4bn over the period.^{iv}

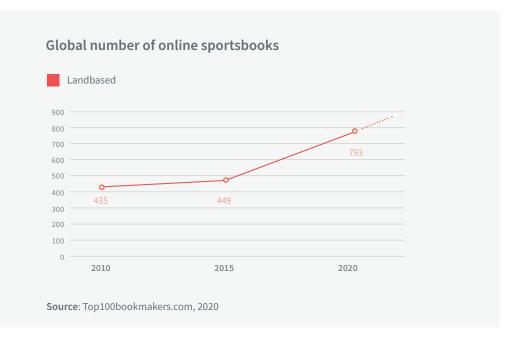
Gross win in the global betting market is projected to rise from \$88.5bn in 2021 to \$114.9bn in 2024, with land-based betting increasing by 27% and online betting rocketing by 33% over the period.

Increasing demand, competition and the rising commercialisation of sporting events, as well as the incremental introduction of regulated sports betting on a state-by-state basis in the huge US market, are expected to fuel expansion. All territories where regulated online gambling is maintained can expect further growth, although Asia-Pacific is expected to outpace other regions

in terms of expansion as it is set to account for almost half of the global value of the sector by 2024.

Furthermore, mobile betting will continue to grow thanks to the increasing availability of the required technological infrastructure in various emerging markets. In addition, as outlined by the graph below, the trajectory for the number of dedicated platforms allowing customers to place a wager wherever they are, is pointing firmly upwards, with a sharp increase since 2015 leading to 793 active online sportsbooks being registered globally by the end of 2020. vi





Betting products and services themselves have also been adapted to enable more wagering opportunities than ever before. For example, in-play betting is continuing to expand globally with the growth of rapid markets, which split a game into quickfire one-minute intervals in order to increase the number of betting opportunities during a sporting contest.^{vii}

In addition, esports and virtual sports betting registered a significant uplift in 2020, partly due to the pandemic wiping out traditional sports for

an extended period of time, while the emergence of simulated sports provided operators with a new vertical.

With sports betting – and the services, events and technologies that underpin it – continuing to drive expansion, operators face an inevitable squeeze on their resources unless they are able to secure significant investment. This has become more challenging in a market that is primed for growth and is therefore set to become more competitive.

Many operators are looking to scale up

whilst keeping costs low in order to satisfy anticipated levels of demand, which will only increase given the congested nature of the global sporting calendar in the coming months.

Therefore, the opportunity to strike partnerships with third-party suppliers that can assume responsibility for key responsibilities has never been more important for ambitious betting companies.

However, despite an increasing willingness to utilise partners to fulfil various aspects of day-to-day business, there is a lingering reluctance by some operators to seek outside assistance.

Crucially, trading and risk management is one area of potential support that remains disproportionately underrepresented in betting industry partnerships.

According to Sportradar's Managing Director of Managed Trading Services (MTS) Paolo Personeni, the prospect of allowing a third party to assist with such responsibilities is still seen as instinctively "taboo" by some in the sector, even though this counters the evidence that such support can improve sustainability, spread risk and generate growth. ix

This paper will explore the opportunities, challenges and concerns relating to partnerships in the betting industry, with a special focus on the field of trading and risk management, and will also look to the future to see how relationships between suppliers and operators will continue to evolve.



Operators in the gaming sector have traditionally relied on partners for certain operational tasks. Responsibility for key aspects of platform design and functionality, for example, is just one area that has typically been handed over to an external party.

This established pathway is driven by the nature of the industry, which demands rapid scalability and clear return-on-investment expectations in an ever-changing technology, media, sports and entertainment landscape.

Scalability

Stav Zilbershtein, CEO at Hyperion Tech LTD, a provider of development outsourcing for the blockchain and financial service sectors, says that some companies can report a fivemonth cycle to recruit one engineer, with such delays stunting growth.

"In an aggressive, fast-moving industry like iGaming that simply doesn't cut it," he says. "After the five-month cycle of scouting you encounter at least three to four months of integration for that team member into your organization, and you are talking about eight to nine months to make things work." Partnerships can provide operators with a cost-effective, deep understanding of an aspect or area of the betting market via a range of products and services that can support the business, according to Daniel Fenner, Head of Sales in Europe at Sportradar.

Put simply, innovation and creativity can suffer due to a lack of development resources, but an external partner can remove bottlenecks.^x

Warren Murphy, Chief Product Officer – Betting and Gaming at Sportradar, also highlights the opportunity for "specialism from scale, leading to performance improvements that would not be possible without the supplier."

He adds: "A good supplier is continually investing to improve their service based upon extensive operator feedback. In most cases, an operator could never invest at the level, speed or consistency of specialist suppliers, so they continually benefit from ongoing service improvement. This flows through to performance enhancements that operators would really struggle to realise on their own."

Flexibility

The nature of such relationships can also be flexible, with the client able to select aspects of a service to be managed by a supplier, rather than a complete offload, and the arrangements can evolve over time.

According to Murphy, it is "very common" for a temporary or one-off product-focused "sale" to graduate into a more permanent, long-term, service-focused partnership surrounding the provision of betting data, odds and other tools, as well as marketing.

"Many operators operate a 'proof-is-in-thepudding' strategy, and often still with a small number of services to gain confidence that the services are as good as sold," he says.

"Once they gain confidence that their performance is improving in a cost-effective way, then they start utilising more services. As with any other business relationship, the supplier has to earn a certain level of trust for the customer to expand the relationship.

Providers can offer sportsbooks various benefits, such as capability, capacity, knowhow and technology, all of which can improve the business' outlook by increasing efficiencies, providing support for projects that fall short of requiring full-time or permanent staff, optimising cost management, and accelerating day-to-day operations.

What operators say:

In a survey of Sportradar client operators carried out in November and December 2020 (hereafter known as the 'Sportradar 2020 Client Survey'), key trends emerged regarding the motivation to establish such partnerships.

Individuals representing different operators were asked to rank the most important benefits resulting from partnerships from the following list:

- A Avoiding internal capacity bottlenecks
- B Driving growth (scaling operations, opening up new revenue streams – and improving ROI)
- Expanding and gaining access to new market areas by leveraging external capabilities
- Focusing on core business processes while delegating mundane, time-consuming processes

- **E** Guaranteeing results by using experts in their field
- Increasing efficiencies by trans ferring internal resources to other projects
- Mitigating financial and operational risks
- H Optimising cost management (reducing overheads)

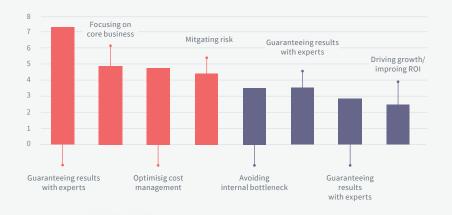


Two-thirds of the operators who responded in the survey placed 'guaranteeing results with experts' as their top choice. Respondents otherwise highlighted the opportunity to optimise resources, such as streamlining costs, allocating staff to core business processes and avoiding internal capacity bottlenecks. Mitigating financial and operational risk was ranked above driving growth and expanding by gaining access to new market areas by leveraging external capabilities. This trend tallies with broader research that suggests that cost controls have - at least temporarily – become more important than scalability and driving growth.

Whilst 20% of providers across different industries in 2020 were told by their clients that accelerating the speed to market was the main reason for outsourcing, 40% were told that flexibility was the main objective.

However, 70% of the suppliers said that their clients cited cost reduction as the most important factor, marking a significant shift from two years earlier, when the key aims were scaling faster, enhancing user experience and achieving a competitive advantage.^{xi}

Most important benefits of partnerships for operators



Source: Sportradar 2020 Client Survey

Note: Scores were calculated on average, with operators able to rank each perceived benefit in terms of importance from a maximum possible score of 8 to a minimum possible score of 1.





Quality

Antonio Papa, Director of Business Analysis at SKS365, says that outsourcing processes that were previously undertaken manually by inhouse staff members had "saved a lot of time and resulted in a better final product for the customer". Simone Suppa, Operations Manager at Novusbet, adds that finding external partners can be necessary due to a range of scenarios, including a lack of internal resources or expertise in a specific area.

An anonymous survey respondent comments: "The biggest reason for us to outsource is that it allows us

to use internal resources to focus on other areas. The resource that would be required to price up an entire sportsbook offering versus taking an outsourced solution is significant, not just in the ongoing maintenance of the operation, but in the initial planning and set-up."

Another respondent explains the importance of guaranteeing results by using experts in their field by adding: "We don't want to risk the quality of our product offering by choosing unreliable providers."

Communication

The importance of two-way communication channels in such a relationship – comprising an extensive feedback loop of operator issues and requirements – is also stressed by Murphy.

He adds: "We invest the most in a number of key areas for the benefits of operators, including sports rights to gain access to key data; integrity services to ensure service quality is very high; data capture, ensuring processing at super-fast speed; and artificial intelligence and machine learning to deploy highly refined solutions and products, as well as highly sophisticated customer, price and liability management solutions from a trading perspective."

Clear communication between both parties is integral and, with that

in mind, providing an Operational Account Manager (OAM) as a dedicated point of contact for a bookmaker can allow providers to react and fulfil requests swiftly, enhancing the success of the partnership.

McArdle explains how he endeavours to appoint OAMs who are well-matched to a client's aims by, for example, assigning a cricket specialist to an operator in India. "We communicate as much as we possibly can with our clients, as the more we generally understand about their business intentions and strategy, the more we can tailor our account management service to our clients' individual needs," McArdle says.



One of the reasons for operators' relative reluctance to call upon the support of third parties in terms of trading – even for bookmakers that have already successfully outsourced numerous other aspects of their day-to-day business – is that they often view such an area of responsibility as intrinsic to their own personality as a business.

This is a common concern when it comes to striking partnerships, according to the Sportradar 2020 Client Survey. Warren Murphy, explains that there are multiple reasons for bookmakers to be reluctant to use the services of external companies for certain areas, including the belief that core operations such as trading are "in their DNA".

He also cites quality and cost as

other possible reasons given across the broader industry, and poses the specific question that operators need to ask of potential supplier: "Is the quality of service good enough and could they do it better and cheaper themselves?"

In the Sportradar 2020 Client Survey, operators were asked to rank their most significant concerns regarding partnerships, from most to least important, out of the following:

- A Having no flexibility in overall operations 'an all or nothing approach' that means bookmakers have to take on board a whole package or none of it, without being able to choose specific areas
- B Losing oversight of the project or day-to-day operations who is in control?
- C Losing exclusive access to valuable data and not being able to keep it in-house

- D Losing the ability to pivot quickly if a new approach is required
- Losing control over costs and deadlines/wasting resources
- F Losing quality control
- G Losing control of legal compliance
- H Losing your unique personality as a company

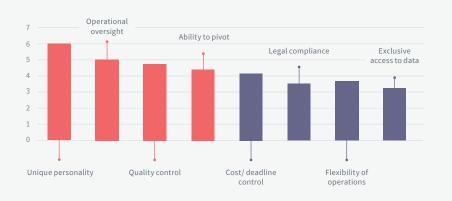
Half of the participants in the survey said that 'losing your unique personality as a company' was one of their top two concerns when it comes to partnerships, with all of the respondents placing it in the top five.

Losing 'flexibility in overall operations' – specifically, having to 'take on board a whole package or none of it, without being able

to choose specific areas' – was a top-two concern for one-third of the respondents, but otherwise was not mentioned as a major concern by the majority of those surveyed.

Several factors relating to losing control in areas ranging from operational oversight to quality and legal compliance also attracted significant scores.

Operators' greatest concerns of what can be 'lost' through partnerships



Source: Sportradar 2020 Client Survey

Note: Scores were calculated on average, with operators able to rank each perceived benefit in terms of importance from a maximum possible score of 8 to a minimum possible score of 1.

Are we going to be compliant?

The issue of legal responsibility through outsourcing has been a common concern across different sectors, but it has become especially important in recent years for operators in the betting sector. The industry at large is under unprecedented levels of regulatory scrutiny, especially in terms of marketing.

Gambling advertising is banned in several countries, including Italy, while self-exclusion regulations, requiring operators to ensure those who have signed up to such schemes do not receive gambling marketing materials or are able to access their services, have also been tightened in various countries, including Sweden. Furthermore, operators in various regulated territories, including the UK, have been warned that they will be held responsible for any misdemeanours by their affiliate partners.

Bookmakers are wary of being over-reliant on one supplier and are aware that integrating suppliers is "sometimes difficult to fit on their own roadmaps" so can seem like an "operational burden," Murphy adds.

Compliance



Will remote teams be committed?

The vast majority of providers work with clients remotely – a practice that has traditionally been viewed with a degree of caution by businesses. However, the landscape may have changed due to a sharp rise in enforced remote working by operators' own staff due to Covid-19, with the Chartered Management Institute suggesting the shift away from the office is "unprecedented".

For example, in December 2020, 83% of employers in the United States expressed a positive attitude towards remote working – a rise of 10% since June 2020.^{xvi}

Stav Zilbershtein, CEO at Hyperion Tech LTD, says the positives of working remotely from an operator's perspective include not being "limited to one location where your office is" and having access to a broader talent pool.

"The main concern that we see companies worry about is remotely working teams," he adds. "They doubt if such people are able to be as committed to the project as their own employees. We can say that from working with various clients in the industry we see a high level of commitment from the engineers, especially for companies that treat them as one of their own.

"The pandemic forced many companies to work from home, and they realised that working from home didn't destroy their productivity levels and, in some cases, things stayed on track or even got better for some aspects of the business."

However, building a positive working atmosphere across a physically disparate workforce – and especially one that incorporates the support of third-party providers – requires proactive management strategies. "The key indicator for success that we see is strong product management that navigates the teams through the roadmap," Zilbershtein says. "Great software engineers are good at suggesting technical solutions, but what really creates success is when clients understand that they need to navigate and lead the team using their own roadmap.

"The second ingredient is to treat the outsourcing team as your own. Only companies that understand that every person wants to feel a part of the team achieve the most optimal results."

Are these partners reliable and trustworthy?

There are a number of factors that can help to build and maintain a flourishing relationship with a provider, including establishing trust through shared risk, transparency, defined processes and escalation procedures, and, of course, commercial success, according to Sportradar's Head of Sales in Europe, Daniel Fenner.

Furthermore, a majority of respondents in the Sportradar 2020 Client Survey mentioned 'reliability' as one of their five most important factors of a successful partnership with an external service provider. Communication or collaboration and trust or transparency were also highlighted as important factors by approximately half of the respondents.

Additionally, issues such as 'support', 'service' and 'cost' were mentioned regularly, while the related themes

of 'efficiency', 'agility' and 'flexibility' were also noted.

Other important factors of a fruitful partnership included 'prioritisation of the long-term relationship over short-term gain', 'keeping the client involved in product development' and 'providing a dedicated account manager to understand the client's needs'.

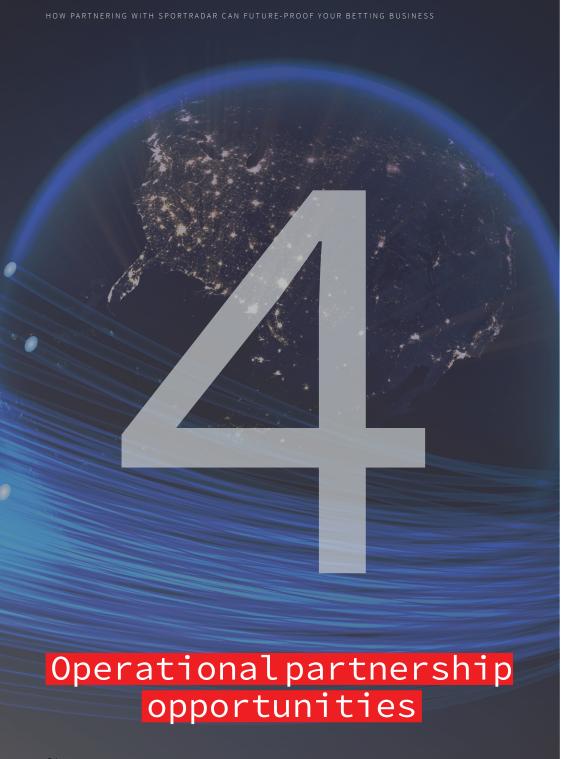
Of course, at the outset, due diligence is essential in terms of selecting reputable, reliable and trustworthy partners.

Zilbershtein suggests collecting references and gauging insights from contacts and other clients about providers. "A good outsourcing partner can save costs and allow you to focus purely on what makes a difference – onboarding and execution of your deliverables," he says.

Simone Suppa, Operations
Manager at Novusbet, says that any arrangement needs to represent a true collaboration. "Even outsourcing takes time," he says. "You cannot just outsource and forget about it. There are always situations where the core of the main company must act and find solutions."

As proactive bookmakers commit resources towards ensuring customers' expectations of a personalised experience are met, it is also important for those operators to seek relationships in the same spirit with suppliers that are willing to provide a tailored service to fulfil their specific requirements.





Various aspects of a bookmaker's day-to-day business can be supported by a third party, including the following areas, which are all explored in further detail below:

- A Data collection and analysis
- B Customer relationship management
- C Customer verification
- D Marketing

- Platform design, development and functionality
- **F** Research and development
- **G** Trading and risk management

4.1 Data collection and analysis

For operators, data collection and analysis processes can be split broadly into two areas:

- Historic or live sports data underpin the entire betting process, including the provision of game-related insights to customers, setting the odds, and defining the success or failure of every bet that has been placed.
- Data that can be collected and analysed about customers
 - and potential customers
 - can help bookmakers to understand individuals more effectively, so that the betting experience can be customised accordingly. Such data can be applied to other operational partnership opportunities, including customer relationship management (Section 4.2) and marketing (Section 4.4).

For many long-established operators, the collection and analysis of match data was the first area of responsibility they handed over to a supplier, with the advent of in-play betting helping to drive demand for such services and contributing towards the growth of Sportradar and its Betradar brand in the early 2000s.

Given the ever-increasing volumes involved, the management of such data is one area that operators cannot realistically consider bringing back in-house. To underline the scale of the task, Sportradar now has more than 7,000 data journalists worldwide. Suppliers are constantly enhancing their data technology capabilities to increase coverage, improve quality and speed, and guarantee stability and resilience, while identifying solutions to plug any gaps in regional internet coverage. Increasingly, providers can also offer bespoke data-collection

services for a specific operator around niche sports or evens.

Operators also rely on the speedy and accurate provision of sports data to close any time lag between an event taking place during a sporting contest and the possibility of a bet being placed. The practice of money being wagered on an event that has already happened is known as 'courtsiding', where real-time information is transmitted by an individual at a sports venue to another individual who is able to place a guaranteed winning bet remotely before the bookmaker is able to close the wagering opportunity.*

Sportradar's data collection services have a delay of less than one second between the live event happening and then being recorded for bookmakers, allowing the odds and betting opportunities to be updated accordingly. xviii

4.2 Customer relationship management

As mentioned in Section 4.1, effective customer relationship management (CRM) is underpinned by data. These data can be sourced in one of the following four ways: xix

- First-party data, collected by the operator directly.
- Second-party data, collected by a provider that then sells on the data to an operator.
- Third-party data, purchased by an operator from an aggregator that is not the original collector of the data..
- Second-party data, collected by a provider that then sells on the data to an operator.

The data can be retrieved from customer feedback, mobile application analytics, registration information and point-of-sale records via website visits, newsletter subscriptions, online purchases and other touchpoints. Website cookies have also traditionally been used for such purposes, although upcoming changes will reduce their influence.xx However, even if operators have the capacity to collect data, the mining methods they use might be insufficient due to a possible lack of knowledge or the necessary algorithms.



Operators are increasingly aware that basic customer data - such as age, gender, location, income, marital status, employment status, household composition, education and ethnicity - merely provide the starting point for segmentation and can be unreliable when analysed in isolation.xxii A greater understanding of audiences can be achieved by integrating geographic, behavioural, transactional, needs-based and psychographic data, alongside demographic details, to outline the 'who', the 'where', the 'how' and the 'why' of a sports fan. xxiv The growth of digital platforms, including over-the-top (OTT) streaming platforms, has opened up

countless additional data touchpoints to provide increasingly granular analysis*** by delving into customers' personal interests and intents.***
Furthermore, data can be used to interact with punters and provide a personalised experience, helping to build brand loyalty through a tailored CRM strategy, with sports fans craving more tailored and accessible content as part of an immersive experience. **xxvii

Interactive content generates twice as many conversions as passive content in a retail environment, while 88% of marketers claim that interactive content helps them to stand out amongst rivals.

However, a personalised CRM

approach requires significant time and financial resources, from delivering basic customer segmentation to ongoing analysis and interaction.

During the Covid-19 pandemic, given the widespread enforced closures of retail establishments, businesses across different sectors pivoted sharply towards optimising their digital relationships with customers, leading to significant growth for leading CRM providers such as Salesforce, which registered revenue growth of 26% year-on-year in the first nine months of 2020.***

In the Sportradar 2020 Client Survey, CRM was flagged up as the most common potential area of business

to be outsourced in the future. One operator stated that outsourcing CRM, encompassing "a recommendation engine and affiliate marketing" would be attractive propositions respectively due to "the resource required to build a comprehensive CRM system and... the opportunity to leverage affiliates' reach and experience".

CRM services such as those provided by Sportradar also offer a Player Lifetime Value evaluation and can be dovetailed with customer verification requirements (Section 4.3) and marketing campaigns (Section 4.4).



Customer verification

Lawmakers in regulated online gambling markets are applying greater scrutiny to customer verification processes than ever before.

Last year, for example, the UK Gambling Commission updated its age verification requirements - which previously gave operators 72 hours to carry out the necessary checks - to include further clarifications designed to "prevent harm or detect criminal activity" and identify individuals who had previously "self-excluded" from being able to access gambling websites. Online gambling operators are required by UK law to ensure they fulfil so-called Know Your Customer (KYC) checks to comply with anti-money laundering licensing conditions.

Similar measures have been undertaken in other markets, including various states across the US, while Germany and the Netherlands have agreed to adopt a zero-tolerance approach to ageverification infringements as part of The Interstate Treaty on Gambling, which is set to come into force in July 2021. Under the treaty, penalties for wrongdoing will include licence suspensions and minimum fines of €500,000 (\$600,000).xxxiii

More broadly, identity fraud, resulting from stolen credentials, has become increasingly common in cyberspace. In iGaming specifically, allowing fraudsters to slip through the net can have a negative impact on the relationship between the business and customers whilst putting the operator at risk of wider reputational damage and financial penalties.xxxiv

However, customer verification, whilst essential for compliance, is a time-consuming process for operators to apply in-house,

especially if their aim is to scale up other operations relatively quickly and to focus on building the brand.

Service providers like Sportradar are able to integrate KYC components into a Player Account Management



4.4 Marketing

A highly targeted, programmatic approach is an increasingly important component of a successful marketing strategy Services such as the Sportradar ad:s are designed to meet sportsbooks' digital marketing needs through programmatic advertising, which focuses on the efficient customer acquisition and retention through the delivery of relevant content to the right audience at the right time.

The solution provides a vital opportunity to learn about the target audience, to access to various proprietary marketing technologies – such as a proprietary ad:s marketing platform, specifically built for the betting industry – to offer unique sector-relevant features for effective and efficient campaign management and control, and to utilise real-time performance dashboards. Audiences are profiled by quantified sporting interests and betting intent measures, producing precisely defined segments for efficient targeting.

This targeted approach to customer acquisition, retention and reactivation is complemented by other marketing services that are driven by artificial intelligence and are supported by Sportradar's Managed Trading Services (MTS) odds and risk management solution.

The strategy is essential as, in an ultra-competitive marketplace, engaging sports betting audiences is becoming more challenging.

Customers increasingly demand a personal service – deemed to be 'important' by 72% of sports fans^{xxxv} but such an approach is far more timeconsuming and costly than broader engagement strategies. However, the drive for personalisation cannot be ignored. Across all sectors, customers are more likely to consider paying a premium for a bespoke product or servicexxxvi, while a successful personalisation strategy can deliver between five and eight times the return on investment of marketing spend and lift sales by at least 10%.xxxvii

In terms of customer acquisition, affiliate marketing also plays a central role in the strategies of many bookmakers. There are higher upfront costs associated with setting up an in-house affiliate programme, and converting leads typically takes longer than with an outsourced programme, which will already have an extensive network of affiliates and tools in place. xxxxiii

Furthermore, building a website, populating it with content, and maintaining the platform – including the potential licensing fees – are all tasks that require substantial investments.

Therefore, many operators strike partnerships with affiliate marketing providers, leading to the transformation of established suppliers like Better Collective, Catena Media and Raketech into so-called 'super-affiliates' in recent years.'

In terms of adopting a more tailored approach, some industry experts also believe there are untapped opportunities for bonus management

to enhance the personalisation of the customer experience. Bonuses can be a versatile tool to deploy through a player's life cycle to maintain engagement.xii

As mentioned in Section 4.2, CRM services such as those provided by Sportradar offer a Player Lifetime Value evaluation and can be used to underpin marketing activities like promotions and bonusing.

As the industry takes greater accountability for responsible gambling, marketing strategies – including the use of bonuses – are facing greater scrutiny, requiring tailored approaches that can be managed effectively and reliably. XIII





4.5 Platform design, development and functionality

Building in-house betting platforms or devices requires significant financial resources and expertise, with the timeline for such development work often stretching to six months, delaying the product launch in comparison with an option provided by a third party.x^{liii}

Building in-house betting platforms or devices requires significant financial resources and expertise, with the timeline for such development work often stretching to six months, delaying the product launch in comparison with an option provided by a third party.

Off-the-shelf, adaptable products can be configured to fulfil unique requirements, complement existing processes and satisfy market-specific licensing and regulatory criteria.

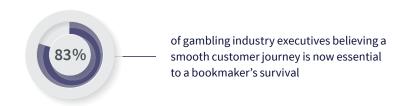
Furthermore, third-party solutions can be used to adapt existing

operator set-ups, as well as building platforms from the ground up.
With online platform design and development, most providers will offer modular and agnostic modules, allowing the operator to pick and choose specific options, such as a trading and risk management module, a business intelligence and reporting module, a sportsbook module and a Know Your Customer (KYC) module. This enables a flexible and customisable approach.
Optimising functionality is vital, with 83% of gambling industry executives

believing a smooth customer journey is now essential to a bookmaker's survival, rather than just providing a competitive edge. Xliv

Furthermore, supplementary designrelated features, when integrated into a platform, can enhance the appeal of a platform. Data-driven visualisations can provide viewers with more accessible and meaningful analysis than straightforward statistics.

This is especially important online as, on the average webpage, users have time to read only just over one quarter of the words that are visible.xlvi



4.6 Research and development

Among the gaming sector's most valuable listed operators, those that do record research and development (R&D) separately on their balance sheets have increased their investments in this area in recent years.

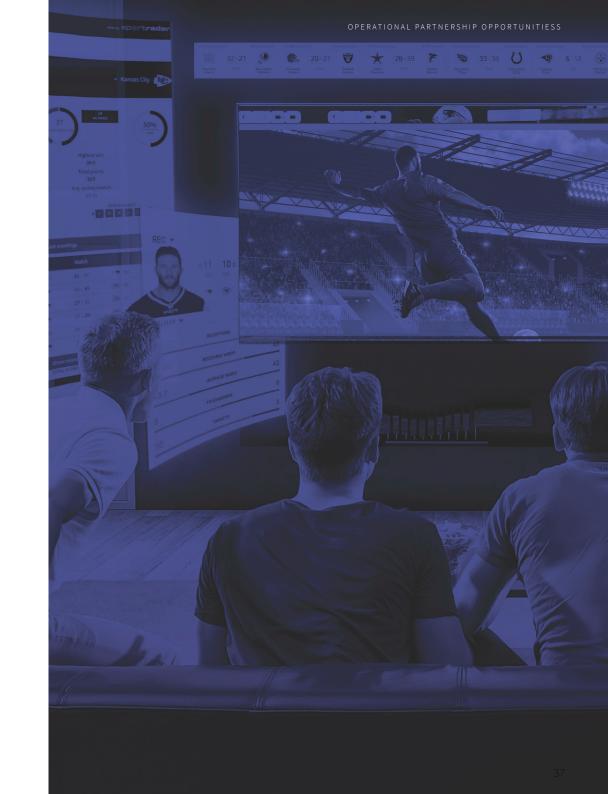
For example, year-on-year increases in R&D expenditure from 2018 to 2019 ranged from 9% for 888 Holdings**Ivii to as much as 75% for Flutter Entertainment.**Iviii In high-tech industries, some businesses invest at least 40% of their R&D budget on third-party providers, and some of the world's most famous brands, like Google, Skype, Slack and WhatsApp, have all outsourced R&D at certain key stages of their development.

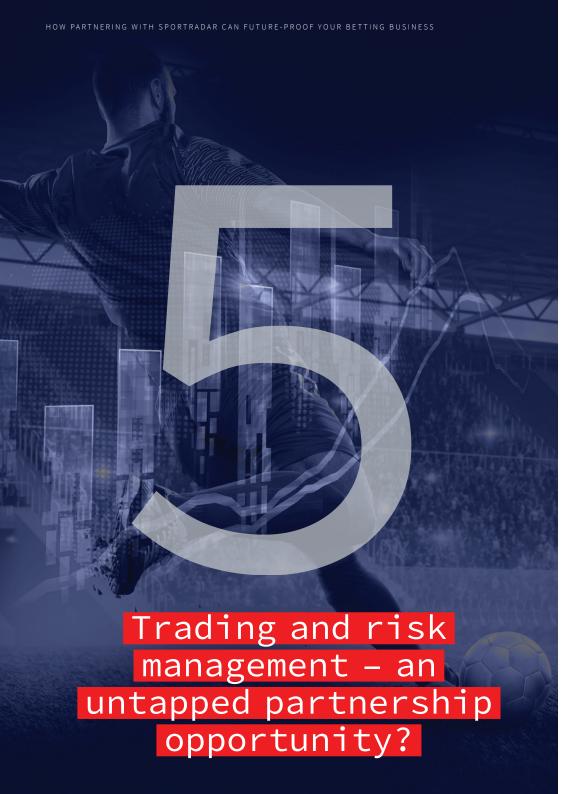
Outsourcing R&D offers increased flexibility, giving operators the chance to keep overheads low rather than hire new members of staff to fulfil such tasks at greater expense when there are no guarantees that further concrete projects will follow. In addition, in terms of operator investments that are closely associated with research and development, but do not necessarily sit under R&D on the balance sheet, several gambling companies have invested in launching business incubators that have helped to drive cutting-edge innovation.

William Hill, "Sky Betting & Gaming ", Matchbook " and DraftKings " are just some of the operators to have spearheaded the launch of launch start-up accelerators in recent years.



In high-tech industries, some businesses invest at least 40% of their R&D budget on **third-party providers**, and some of the world's most famous brands, like Google, Skype, Slack and WhatsApp, have all outsourced R&D at certain key stages of their development.





5.1 Misconceptions

Trading is considered to be one of the intrinsic foundational components of any bookmaker. For that reason, whilst calling upon external trading service providers is an essential step for almost all start-ups – unless they have an unusually large budget at their disposal – traditionally there has been a greater reluctance by some established operators to embrace such support.

According to Daniel Fenner, Head of Sales in Europe at Sportradar, some partnership opportunities can depend on the relative maturity of certain markets.

"In less developed new markets, operators are more likely to outsource their trading to a proven supplier such as Sportradar, whereas in developed markets with mature books, the likelihood of outsourcing is lower as they will have a working trading department themselves"

Daniel Fenner ~ Sportradar

The regional aspect does play a role in influencing bookmakers when they are considering a partnership, especially with a provider that has expertise and experience in relation to a certain market's betting behaviour and trends, as well as pricing and competitor offerings, says Niall McArdle, Sportradar's Head of Operational Account Management. Meanwhile more mature bookmakers are more likely to consider external trading opportunities due to cost considerations, he adds.

However, a significant proportion of mature operators remain instinctively wary of teaming up with a third-party provider for such a service. Sportradar's Managing Director of Managed Trading Services (MTS), Paolo Personeni, says:

"In today's marketplace that is an outdated thought process that restricts companies from broadening and enhancing their offering. Instead, it is now the case that bookmakers that choose to extend their trading capabilities by partnering with a third-party supplier that has the latest technology at its disposal can hold a competitive advantage." In

Paolo Personeni ~ Sportradar

sp**o**rt**radar**

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5.2 What are the benefits of a trading partnership for an operator?

Striking a trading partnership with an experienced provider can be a gamechanger for bookmakers that are looking to broaden their horizons and manage internal fixed costs by reallocating resources to focus on other areas of responsibility, including their strategic marketing and product offering.



5.2.1 Knowledge transfer

Providers can offer expertise in various areas, allowing their clients to expand their knowledge base. A supplier's perspective is likely to be broader than that of an operator, given that the former will work across different books.

The third party may also have expertise in certain geographical regions, channels, player profiling processes and sports of interest for an expanding sportsbook operator. For example, Covid-19's disruptive impact on the global sporting calendar forced many operators to explore broadening their sportsbook offerings into emerging verticals like esports, as well as virtual sports and simulated reality-based gaming. Providers such as Sportradar

understood this, and by launching its Simulated Reality product in response to the pandemic, MTS provided support to bookmakers that had insufficient experience of either trading or managing the risk for such an offering.

Moreover, trading and risk management support can also be vital for established sports betting products. "While many may already know how to trade on such sports, the advantage of being able to rely on experts to ensure speed and less margin for error is one of the best ways to be assured of less risk while being able to stand apart from the competition and tap into more revenue," Personeni says.



5.2.2 Technology transfer

An operator that develops its own technology might not consider features that would accelerate growth, whereas a supplier will gather feedback from multiple bookmakers in order to refine its offering. Furthermore, the development of artificial intelligence-driven mathematical models requires significant investment and millions of data points. A third-party provider

will typically have a far larger pool of datasets to work with in order to underpin progress.

In terms of research and development, providers will usually have the capacity to focus on technological enhancements in a more costeffective manner than an operator, which may need to redistribute resources to other projects.

"Some operators like the idea of cost-saving by way of offloading low-margin or longtail sports to external trading services to manage. As a result of the Covid-19 lockdown, operators can now really see the value of having access to an external trading service that can manage their customers' business fluidly, irrelevant of any disruptions."

Niall McArdle ~ Sportradar



5.2.3 Financial flexibility

As an example that follows on from the previous point, fixed ongoing costs in relation to research and development can present a significant burden for operators determined to keep such responsibilities in-house, from business intelligence teams and analysts to maintenance and hosting expenses.

Alternatively, providers will typically require a variable fee as part of a revenue-share model that dilutes the risk for operators, whilst simultaneously allowing them to use the necessary tools and algorithms.

Also, from a financial resources perspective, bookmakers can rely on smaller trading teams thanks to the support of third parties, helping to maximise internal efficiencies.

"A lot of operators in general realise there are significant cost savings made from reducing trading personnel, which is especially appealing considering the quality of trading performance available nowadays by external trading services," McArdle says.





5.2.4 Operational flexibility

Using a partner for trading support can prove to be cost-effective for bookmakers that are looking to avoid having large teams across all sports, while external trading providers can also manage specific areas, or alternatively all of the offering, to provide operational flexibility.

This was especially important during the height of the Covid-19 pandemic in 2020, when operators were able to hand over trading responsibilities to providers and ensure a seamless transition whilst temporarily reducing their active workforce.

As Darren Surridge, Head of Product – MTS, Sportradar, outlines, bookmakers can fully or partly outsource their trading "whenever they want".

Darren Small, Managing Director – Trading Services, Sportradar, adds: "With all the options available and the tailored personal account management, our clients are able to be as hands-on as they wish. We can scale operations and create clear operational and intelligence efficiencies."

Operators can decide on the sports, events and markets they offer, as well as when they want to publish odds, potentially extending operational times and providing an out-of-hours service.

While options still exist for operators seeking complete sportsbook management, there is far greater flexibility in the types of services available that can expand trading

proficiencies whilst keeping the client in control.

Operators can shift trading responsibilities at certain times when demand spikes. For example, MTS's Integrated Trading Solution allows bookmakers to integrate their trading rooms with Sportradar MTS to utilise the same trading and risk management technology, but also to receive support for emergency content or long-tail sports that are experiencing sudden bursts of activity.

The development of Integrated Trading Solution is a perfect example of how close relationships between operators and providers can lead to the development of mutually beneficial solutions. The technology that was initially created for MTS

in-house purposes only, has been made available for all clients that were seeking fully flexible trading and risk management tools, without the requirement to hand over their trading control.

"Our team of 400 traders and analysts work all across the world from eight different locations to ensure round-the-clock coverage," Small adds. "MTS clients can respond to market conditions whilst trading set-up guarantees ensure a sportsbook profits regardless of the single-book performance.

"The whole risk community benefits from the clustered liability and smart information derived from the marketplace by our complex artificial intelligence systems."



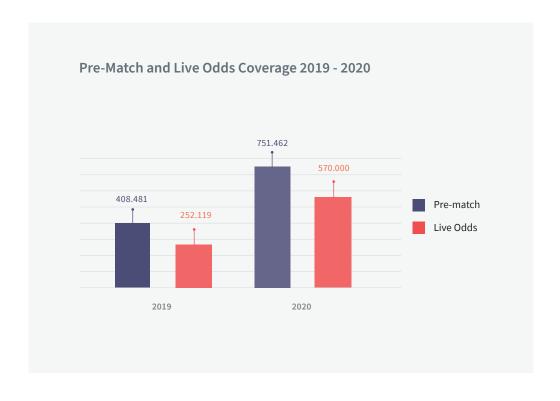
5.2.5 Cope with increasing content

Even before sportsbook offerings were expanded, sports wagering websites or mobile applications could offer millions of betting opportunities every day.\(^{\vi}\)

Given the inevitable growth of sportsbooks, as operators seek to tap into niche and growing sports offerings whilst introducing innovative new betting products, retaining trading responsibilities exclusively in-house has become increasingly challenging.

Sportradar's Pre-Match Odds
Service, for example, registered
a 84% increase in 2020 to 751,462
events despite many sports rightsholders being forced to pause, scale
back or cancel their competitions.
In-play coverage increased by 126%
to more than 570,000 live events.
Such a volume would have pushed
bookmakers that were already
contending with reduced operational
capacities beyond their realistic
capacities.









5.2.6 Efficiency and precision through automation

trading technology, which learns from millions of data points to enhance the output, enabling experts to focus on investigating details and refining the quality of the product suite.

With MTS, for example, clients can choose odds margins by using the Betradar Ctrl tool and can use timebased odds to be more aggressive or conservative with their offers at certain points before and during a contest.

Automation plays a central role in

Small adds: "Our clients have options to use our cutting-edge software to self-manage all parts of the trading process, from our pre-match Ctrl interface – providing controls to adjusting odds within our model framework – to Live BetPal; allowing the trading of individual matches, and finally the Integrated Trading Solution, giving the customers full risk-management tools."

Alongside the Full Trading Solution offering, the Integrated Trading Solution additionally provides

advanced trading algorithms and machine-learning processes that can help, for example, to profile each customer automatically, increasing efficiency. Furthermore, MTS recently migrated its entire back-end system to a leading cloud computing provider.

"Cloud computing takes it to the next level with a range of benefits and deep real-time analytics to further enhance the quality of the clients offering," says Surridge, who highlights the service's large liquidity pool and "immense datasets of historical tickets".

The benefits include enhanced player performance insights due to faster computational capacity, the removal of hard ceiling capacities, faster access to critical data and improved data security, as well as greater resiliency.



5.2.7 Controlling your destiny

The support of trading and risk management partners can allow operators to focus on tailoring their offering to provide differentiation in the long term.

"Utilising our trading tools, bookmakers can customise their own individual content using our odds-calculation models," Surridge says. "Bookmakers benefit from the most accurate player profiles, tournament and event ratings, backed by our innovation and expert sports traders, with the ability to adapt values to suit individual preferences where required.

"Bookmakers can also maintain full control of their operations whilst being able to rely on trading and risk management support where required in a way that suits their individual needs."

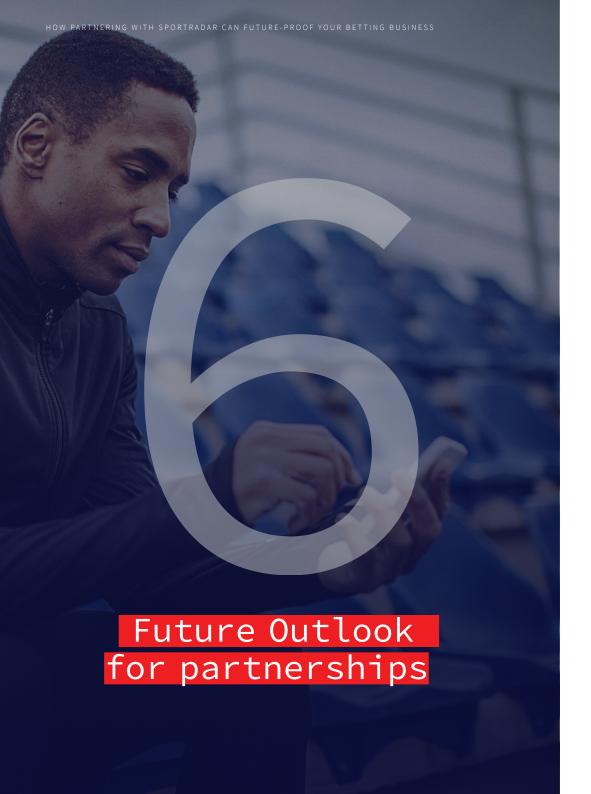
Small adds: "Customisation and personalised management are paramount. Our odds and risk systems have a highly granular configuration, allowing for unique approaches to all our customers' services. On top of this, our team of operational account managers work side-by-side with our trading team and sportsbooks to ensure

intricate configurations continue to be refined to optimise our partners and ultimately the end customer's experience."

Supporting such a service are expert traders who have a detailed knowledge about betting and the sports, providing insights into the psychology of the betting public, as well as the pricing and risk management dynamic.

"Experience in betting – and the risk management side of it – is the key to understanding the right course of action," says one trader, who states that the main elements required to create a successful trading team are:

- Good pricing tools
- Good risk-management tools
- A combination of experience, a fresh approach and enthusiasm
- Good synergy with other internal teams
- Hard work and a hands-on approach



In recent years, with competition in the gaming space intensifying, bookmakers have been utilising the support of third-party providers on an ever-more regular basis. The tumultuous events of 2020, though, have acted as a catalyst to accelerate this process, underlining the importance of fruitful partnerships to operators who are aware of the need to be agile and flexible in order to negotiate challenging and unexpected market conditions.

Looking to the future, partnerships will play an increasingly important role in terms of delivering short-term resilience and long-term growth for betting companies, although it should be remembered that the outsourcing industry itself has also been affected by the pandemic, with providers among the businesses to have adapted internally. [ix]

Stav Zilbershtein, CEO at Hyperion Tech LTD, says: "The pandemic melted many conservative approaches about work, and that is a good thing. More companies understand that the will to have control over their workforce by having them all group up in an office is not necessarily needed to maintain results.

"The load comes off from hefty expenses because office sizes are shrinking. Teams collaborate around the globe, working together remotely and coming together via online means such as Zoom, Microsoft Teams, Slack and so on."

Zilbershtein adds that more outsourcing opportunities will arise out of a greater acceptance of remote working. Even before the pandemic, in early 2020, 64% of businesses across all sectors had reported an increase in remote work requests. By late 2020, 86% of businesses said they expected a further increase in remote work requests in 2021. [xi]

"I think we will keep seeing more remote teams that make things happen," Zilbershtein says. "You can see many of the big players in the market already are involved to some extent or another in outsourcing activities.

"We will keep seeing more of that as the market in the US and Latin America continues to grow. The need to scale fast keeps rising and more organisations will opt for lean and agile outsourcing solutions that can assist them in meeting the demand."



Upward trajectory

The continued upward trajectory of supplier-based partnerships in the would appear to be inevitable. In the Sportradar 2020 Client Survey, operators consistently predicted that more partnerships would be struck by bookmakers for the foreseeable future, with one anonymous respondent saying: "Ongoing changes in the regulatory landscape may make it harder for businesses to remain agile without relying on third-party services going forward." According to Darren Small, Managing Director of Trading Services at Sportradar, in the coming months and years there will be more opportunities to build on the provision of certain services and products, like Managed Trading Services (MTS). Furthermore, trading and risk management partnerships are expected to become

much more common.

Owing to expanding product portfolios by MTS clients, the service and its approach to risk management will continue to evolve and develop in line with increasingly complex and sophisticated requirements, Small says. This will lead to greater automatisation, customisation and quality.

He adds that systems will enable bookmakers to "trade single tickets and grouped liabilities among dark pools, with values and guarantees calculated in real time".

Partnerships will become more prominent in the future of trading due to their cost-effective appeal, with automation driving partnerships in terms of the odds offering, adjustment and customer profiling.

Complementary trends

Various other complementary trends that will encourage bookmakers to consider third-party partnerships are also anticipated.

"The main trends have been on developing scalable services for broad operator needs – for example, events coverage, betting market provision, risk management and turnkey platform services," says Warren Murphy. "As technology and analytics become more capable, I feel we will see a few core trends emerging." In addition, Murphy highlights the continuing drive for customisable and flexible solutions for tailored business needs and the ever-improving quality of products and services that will lead to a more refined use of technology

and analytics.

The need for holistic customer management to ensure a joined-up customer experience by embracing recruitment, retention, activity stimulation, betting product optimisation, trading, customer management, pricing and liability management, as well as responsible gaming, will feed the desire to seek external expertise. Moreover, whether the aim is to mitigate risk and defend market share or seek sharp growth, technological innovations will inevitably open up further future opportunities for operators to link up with providers.



Calling on the support and expertise of a supplier has been a recognised driver of growth for betting and gaming companies for many years, dating back to the birth and early growth of Sportradar two decades ago.

Whereas the early third-party agreements focused on the provision of sports data, relationships between operators and suppliers have blossomed since then to encompass numerous areas of day-to-day business, from platform design through to CRM and marketing.

As indicated by the research conducted for this paper, "guaranteeing results with experts" is commonly cited as the most important benefit of such a relationship. Within that context, the reluctance of some operators to consider accessing third-party support for trading and risk management is an anomaly – and a potential blocker to future growth.

Misplaced concerns

For some, there is a lingering worry about becoming overly reliant on suppliers for such a core aspect of the business. However, the evidence shows that those concerns are misplaced.

Sportradar's Managed Trading Services (MTS) Integrated Trading Solution, for example, allows operators to use as much of the provider's technology, expertise and support as they wish, without handing over any actual control of their destiny. For those bookmakers that do engage such services, there are huge opportunities to spread risk and expand.

Through such partnerships, deeper insights can be garnered into betting

behaviours, enabling a more targeted and personalised service, while the tools supplied can generate vital customer feedback for further developments.

Whereas driving growth and enhancing agility were the key aims of outsourcing expressed by operators before 2020, mitigating risk and optimising cost efficiencies due to market uncertainties have understandably taken on greater significance in recent months. However, ultimately the broader focus will switch back to scalability and speed to market.

Operators that have embraced MTS, including several surveyed

for this paper, have consistently cited the benefit of being able to reallocate resources into other areas of the business. Moreover, given the increasingly broad offerings from sportsbooks due to new sports and betting products, bookmakers face an increasingly steep challenge to remain efficient, engaging and legally compliant as their internal resources become thinly spread in an attempt to satisfy demand.

Sportradar's Managing Director of MTS, Paolo Personeni sums up the change of mindset that is required by some operators by saying: "Rather than seeing it simply as 'outsourcing', it is about establishing effective ongoing partnerships for now

and the long term." lxii

Providers want their clients to succeed, and their support can help them to boost a gambling company's sustainability and therefore its brand. According to the Sportradar 2020 Client Survey, when it comes to citing key concerns in relation to partnerships with third parties, bookmakers are most worried about protecting their "uniqueness".

Furthermore, as technological and operational standards improve, established providers will continue to fine-tune their support infrastructure and mechanisms to enhance their reputations as reliable options for businesses seeking to stand out in a cluttered landscape.

Technology

There is little doubt that technology transfer is set to be a key driver in such partnerships in the future. As demand increases and the desire grows to build fruitful relationships with customers, it will be almost impossible to build the required tech infrastructure in-house to cover all opportunities to gain a competitive edge.

It should also be noted that technology provisions in the gambling industry, and especially in terms of trading and risk management, will evolve dramatically in the coming years.

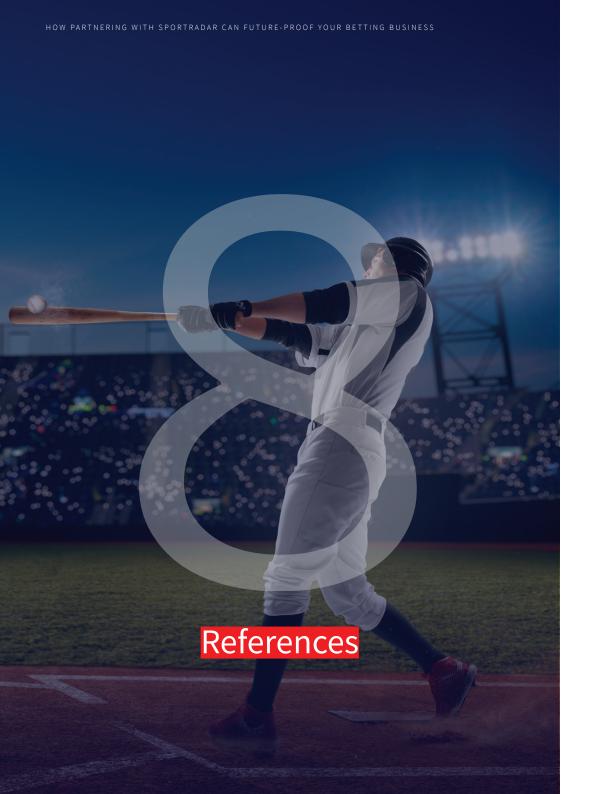
Although in many supplier-based partnerships there is often a

requirement for an operator to implement components or tools that are perhaps not fully tailored to their individual requirements, future tieups are expected to involve far less friction.

Owing to increasingly sophisticated algorithms and data-driven artificial intelligence, operators will be able to integrate solutions seamlessly and independently into their own technological environment.

Moreover, the longer the working relationships between the operators and suppliers, the closer they can collaborate on future-proofing tech solutions.





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