# **Investor Proposal: AI Horse Racing Video Intelligence Platform**

## **Executive Summary**

Horse racing is a multi-billion-pound global industry with robust wagering and strong cultural appeal. Research by *Research and Markets* projects that the global horse racing market will grow from **US\$127.34 billion in 2025** to **US\$182.39 billion in 2030**, implying a compound annual growth rate (CAGR) of **about 7.45** %. Attendance is significant—horse racing is the second-most-watched sport in the United Kingdom, attracting about six million race-goers annually and drawing an audience that is 40 % female. The global sums wagered on horse racing are equally impressive. A feature in *The Plaid Horse* notes that **over US\$100 billion** is bet on races worldwide each year, while local markets also show remarkable turnover—Hong Kong's 2024/25 racing season generated **HK\$138.85 billion (£13.2 billion)** in wagering turnover, a **3** % **increase** over the previous season, and the UK's remote betting market recorded **£2.4 billion** in gross gambling yield (GGY) in 2024/25, of which horse racing accounted for **£771.1 million**.

Despite the scale of the industry, the tools available to professional punters and analysts remain archaic. Traditional form guides are static; they provide basic statistics and commentary but lack the dynamic visual insights that race videos offer. Video replays can reveal a horse's racing style, track-position preferences, response to pressure and the tactical choices of jockeys—data that seldom appears in text-based form guides. To extract these insights, professional punters currently spend hours manually reviewing footage. This manual process is time-consuming, inconsistent and susceptible to human bias. Meanwhile, advances in artificial intelligence (AI) and computer vision have transformed other sports. AI video analysis tools can detect subtle patterns in game footage that escape the human eye, identify player movements and tactics and provide real-time insights for coaches and analysts. Computer vision can also overlay statistics onto live broadcasts and track subjects for safety monitoring.

The proposed **AI Horse Racing Video Intelligence Platform** aims to modernise form analysis by leveraging computer vision, statistical learning and automated video editing to generate dynamic video-based form guides. The system will identify individual horses and jockeys by analysing silks, saddlecloth numbers and physical characteristics. It will then compile bespoke video highlights of each horse's recent performances, annotate sectional times and race positioning and surface patterns that influence future performance. By automating labour-intensive tasks, the platform can reduce analysis time by an estimated 80–90 %, freeing professionals to focus on decision-making. Subscription pricing and pay-per-race options will generate recurring revenue from professional punters, syndicates and serious amateurs. The company seeks an initial investment of £750 k, covering AI development, video processing infrastructure, data licensing, management resources and early market penetration.

# **Market Opportunity**

#### **Global horse racing market**

• Market size and growth: Forecasts show the horse racing market increasing from US\$127.34 billion in 2025 to US\$182.39 billion by 2030, representing a CAGR of

- **7.45** %. Horse racing ranks among the world's most lucrative sports, with major races such as the Dubai World Cup, the Saudi Cup and Australia's The Everest offering prize purses of **US\$12–20 million**.
- Betting turnover: Horse racing betting is a major economic driver. Estimates suggest global wagering exceeds US\$100 billion annually. The Hong Kong Jockey Club, one of the world's largest betting operators, reported HK\$138.85 billion (£13.2 billion) in racing turnover for the 2024/25 season, a 3 % year-on-year increase. The UK's remote sports betting market generated £2.4 billion in GGY during 2024/25, and remote horse racing alone accounted for £771.1 million.
- Audience demographics: In the UK, horse racing is the second-most-watched sport. Approximately 40 % of racegoers are women, demonstrating broad appeal that extends beyond traditional punters.
- Data and media rights: Media rights form a significant revenue source for racing clubs. The Racecourse Media Group and HBA Media recently reported substantial increases in international media rights revenue, reflecting global demand for racing content (exact figures are often undisclosed). In Hong Kong, expanded simulcast rights and commingling with over 70 international partners contributed to record turnover.

## Rise of AI and video analytics in sport

- Video insights drive decisions: AI-powered video analysis can break down footage into components, track player positions and identify strategic patterns. Coaches and analysts use these tools to extract insights that may not be obvious to the human eye. In other sports, AI systems analyse sensor and video data to monitor player movements, identify strengths and weaknesses and provide real-time recommendations.
- Computer vision for augmented reality: AI can overlay statistics and performance metrics onto live broadcasts, enhancing fan engagement and assisting decision-making. Computer vision also helps improve safety by tracking animals or athletes and detecting potential injury risks, as demonstrated by OneSix's horse workout tracking system, which used multiple cameras and ultra-wideband tracking to monitor horses and send real-time alerts to veterinarians.
- Limited adoption in horse racing: Academic work highlights the potential of combining computer vision, statistical learning and game theory in horse-racing analysis. However, existing commercial solutions focus mainly on betting odds and do not provide video-centric form guides. Alezan.ai promotes augmented reality overlays for live racing, and OneSix targets equine injury detection, leaving a gap for punters seeking automated performance analysis.

### Pain points for punters and analysts

- **Manual video review:** Professional punters and form analysts typically watch several race replays per horse to identify patterns and biases. This process can take hours per race meeting and often requires expert knowledge to interpret correctly. The time cost makes it difficult to cover the 100,000 races run annually worldwide.
- Lack of dynamic content: Traditional form guides provide static text, historical results and basic statistics. They rarely include dynamic visuals illustrating how a race unfolded or how a horse responded to various conditions.

• **Opaque insights:** Human analysis is subjective, and valuable information can be missed. Even skilled analysts cannot always accurately quantify a horse's acceleration, stride length or positioning relative to competitors.

These challenges create a clear opportunity for an automated video intelligence platform that delivers richer insights at scale.

#### **Solution Overview**

#### **Core proposition**

The AI Horse Racing Video Intelligence Platform will build a comprehensive system that automatically identifies, tracks and analyses horses during races and produces tailored video form guides.

- 1. Computer vision for horse identification: Using convolutional neural networks (CNNs), the system will detect horses and jockeys in race footage. Identification will be based on racing silks (colour patterns and logos), saddlecloth numbers and morphological features (size, body shape and gait). This method aligns with AI applications in other sports, where algorithms track players' positions and movements. Training data will be built from thousands of labelled race images across jurisdictions.
- 2. Automated sectional timing and trajectory analysis: Once horses are identified, the platform will track their positions frame-by-frame, measure speed and acceleration and calculate sectional times for each segment of the race. This methodology reflects OneSix's approach to measuring stride length and acceleration using multi-camera arrays. Sectional performance can reveal finishing bursts, mid-race lulls and track bias preferences.
- 3. **Dynamic video editing**: An automated editing engine will compile highlights for each horse. It will splice footage from the last four to six runs, overlaying sectional data, positioning and commentary. Videos can be customised according to user preferences—e.g., focusing on fast finishes, wide barriers or heavy-track performances.
- 4. **Interactive dashboard**: Subscribers will access a web interface where they can search for a horse and immediately watch its compiled video form guide. The dashboard will include statistics, recent finishing positions, speed maps and optional AI-generated annotations that explain racing patterns in simple terms.
- 5. **Augmented-reality overlays (future phase)**: Building upon Alezan.ai's concept, the platform could integrate with broadcasters to offer live overlays showing each horse's current speed, position and predicted finishing time. This would engage casual punters and younger audiences.

#### Differentiation

 Video-centric insights: The platform provides dynamic visual analysis, unlike traditional data-only form guides or AI prediction services that output numerical odds. Video content enhances comprehension and engagement.

- **Scalability**: Automated identification and editing enable coverage of thousands of races across multiple jurisdictions. Beta partnerships with broadcasters will ensure access to high-quality feeds.
- Cross-disciplinary AI: Combining computer vision, statistical learning and domain expertise aligns with the integrated AI model proposed in academic research and positions the product for expansion into predictive analytics and game theory modelling.
- Credibility through industry ambassadors: Retired jockeys and trainers will act as ambassadors to validate the platform's insights and help build trust among punters. This is critical in a market that often regards secret knowledge as competitive advantage.

## **Technology Roadmap**

## 1. Data acquisition and licensing (Months 0-3)

- Negotiate agreements with racing broadcasters and data providers (e.g., Racecourse Media Group, Sky Racing, Racing.com, Hong Kong Jockey Club) to obtain race video feeds and metadata. A multi-jurisdiction strategy will prioritise markets with centralised rights and high turnover (UK, Australia, Hong Kong, USA).
- Build a database of racing colours, logos and silks patterns. This may require manual labelling and could leverage publicly available images.

## 2. Model development and training (Months 1-9)

- Develop object detection models to identify horses and jockeys. Start with pretrained architectures (e.g., YOLO, Mask R-CNN) and fine-tune on horse racing data.
- Implement tracking algorithms (SORT, DeepSORT) to follow identified horses throughout the race and record trajectories and speeds.
- Use time-synchronised race calls and digital timing data to validate sectional times.

## 3. Video editing engine (Months 4-10)

- Build an automated editing pipeline using open-source video processing libraries. The engine should ingest detection metadata and automatically clip, merge and annotate segments.
- Develop a user-configurable rule system that selects which performances to include (e.g., last three wins, all runs on heavy tracks).

### 4. Dashboard and user interface (Months 8-12)

- Design a responsive web application for searching horses, playing video guides and viewing statistics.
- Integrate subscription management, user authentication and analytics tracking.

## 5. Beta testing and early revenue (Months 6-12)

 Accelerate the release by deploying a minimum viable product (MVP) within six months. The MVP will cover a limited set of jurisdictions and offer core features—horse identification, sectional timing and basic highlight reels.

- Recruit professional punters, syndicates and racing analysts for beta testing and charge a discounted subscription from day one to validate willingness to pay.
   Early revenues will help fund further development and demonstrate traction to investors.
- Collect feedback on video quality, accuracy of detection and relevance of insights, and adjust models and editing rules accordingly. Establish key performance indicators (e.g., detection accuracy, user satisfaction, churn rate).

## 6. Public launch and ongoing marketing (Month 12 onwards)

- Launch full functionality in initial markets with refined video guides, customisable reporting and an intuitive dashboard.
- Maintain the pay-per-race model for casual bettors and expand premium subscription tiers.
- Begin work on augmented-reality overlays and predictive analytics for later feature releases, while continuing to generate revenue from the core service.

## **Potential technology partners**

RaceVision AI depends on high-performance computing, scalable cloud storage and advanced AI toolkits. Beyond capital from wagering and media partners, the venture may seek strategic support from technology firms that stand to benefit from increased demand for their hardware and cloud services. Companies such as **Nvidia**, **Microsoft** and **IBM** supply the graphics-processing units, AI frameworks and cloud platforms that our system relies on. These providers actively cultivate partnerships with start-ups that can showcase compelling uses of their technology. In return for preferential pricing, co-marketing or equity investment, a partnership would grant RaceVision AI access to cutting-edge infrastructure and lend additional credibility. For the technology partner, our application offers a high-profile reference case that demonstrates the power of AI-driven video analytics in a demanding, real-time environment.

#### **Business Model**

#### Revenue streams

- 1. **Professional subscription**: Target racing syndicates, bookmakers and professional punters with a monthly subscription priced between £199 and £499. Higher tiers will include custom analytics, early access to new features and priority support.
- 2. **Pay-per-race video reports**: Casual punters can purchase single race or single horse reports for a small fee (e.g., £3–5). Bundles of multiple races will incentivise higher spending.
- 3. **B2B licensing**: License API access or white-label video guides to bookmakers, betting exchanges and media platforms. Custom integration fees and revenue-share agreements will generate additional income.
- 4. **Advertising and sponsorship**: Once user numbers grow, targeted advertising within the platform (e.g., racing equipment, sponsorship from stud farms) could add incremental revenue.

### Market sizing and financial outlook

Horse-race wagering is a huge industry, but the number of punters who bet professionally or semi-professionally is relatively small—industry sources suggest about **0.5–1 million** globally. Our medium-term plan is to capture roughly **1–2** % of this cohort within three years, equating to around **10,000 subscribers** paying approximately **£200 per month**. Combined with enterprise licence deals and pay-per-race purchases, this base can deliver revenues in the tens of millions. By year five we aim to double the subscriber base to **20,000** and secure 20–30 enterprise partners. Under these assumptions annual revenue could exceed **£60 million**. Because the platform is delivered digitally, incremental subscribers have low marginal cost, leading to attractive operating margins. These figures align with the projections set out in the Financials section.

#### Investment use

The requested £750 k seed investment will be allocated roughly as follows:

Expense category	% of budget	Purpose
AI & software development	~37 %	Developing computer-visio n models, automated editing algorithms and the user interface
Data licensing & partnerships	~20 %	Securing access to race footage and data sets across key jurisdictions
Infrastructure & cloud operations	~10 %	Cloud compute, storage and bandwidth to ingest and process high-definition video
Management & specialists	~33 %	Compensation for founders, AI engineers, video-processin g experts, legal and compliance advisors and business development specialists

Follow-on funding may be necessary to support global expansion, additional jurisdictions and advanced feature development (augmented reality, predictive modelling). An exit strategy could include acquisition by a major bookmaker, media company or data analytics firm seeking to enhance its racing offering.

# **Shareholding & valuation**

Assuming a pre-money valuation of £3 million and the proposed £750 k seed raise, the post-money valuation is approximately £3.75 million. A revised equity allocation following the seed round is shown in the table below. For longer-term context, we apply an  $8 \times$  multiple to the projected year-five net profit of £30 million under the medium scenario, implying an enterprise value of about £240 million in five years.

Shareholder	Post-seed stake	Rationale	Illustrative value in year 5
Justin Ricke tts (Co-founder )	25 %	Founder equity reflecting ideation, leadership and ongoing managemen t	£60 million
Tim Hodgso n (Co-founder )	25 %	Co-founder & joint managing director, leading commercial execution	£60 million
Seed investor	30 %	£750 k investment at a £3 m pre-money valuation	£72 million
Strategic partner pool	20 %	Equity reserved for broadcaster s, bookmakers , technology partners and key advisors	£48 million

These figures are indicative and subject to negotiation. They highlight the potential upside available to seed investors and strategic partners if the medium-term targets are achieved.

# **Competitive Landscape**

Competitor / Comparable	Offering	Relevance & differentiation
Alezan.ai	Develops AI tools combining statistical learning, game theory and computer vision for horse racing. Promotes augmented- reality overlays to display performan ce metrics during races.	Focuses on enhancing live viewing experience; does not provide comprehensive video form guides. Our platform prioritises post-race analysis and tailored highlights.
OneSix	Built a horse workout tracking system using computer vision and ultra-wide band tracking to monitor speed, stride length and detect injuries; sends real-time alerts to veterinaria ns.	Aimed at equine welfare rather than betting insights. Demonstrates feasibility of multi-camera tracking and real-time analytics, which we can adapt for performance analysis.
<b>Traditional form guides</b> (Racing	Provide	Do not offer automated video summaries

Competitor / Comparable	Offering	Relevance & differentiation
Post, DRF, etc.)	static text analysis, ratings and basic statistics; some include sectional times and pace charts.	or computer-vision-based insights.
AI predictive services (e.g., syndicate models, Betfair-focused analytics)	Use statistical learning and big data to calculate odds or ratings; often proprietary and secretive.	Our platform complements rather than competes with odds models; it enriches analysis with dynamic video evidence.

## **Regulatory & Ethical Considerations**

- Data licensing and rights: Race video feeds are controlled by broadcasters and racing authorities. Securing rights may require revenue sharing and geographic restrictions. Long-term agreements with groups like Racecourse Media Group or the Hong Kong Jockey Club are essential; failure to secure these rights is a key operational risk.
- 2. **Gambling regulation:** The platform will supply analysis and media rather than conduct betting. Nevertheless, it must comply with gambling advertising standards and respect responsible gambling messaging. Levy payments highlight the regulatory environment—UK bookmakers contribute 10 % of gross profits to the Horserace Betting Levy Board, generating £108 million in 2024/25 despite falling turnover. Future legislation (e.g., tax consolidation) could affect bookmaker margins and indirectly influence demand for analytical services.
- 3. **Data privacy and fairness:** When integrating user data (e.g., personalised recommendations), the platform must comply with data-protection regulations (GDPR, Australian Privacy Act). AI models should be transparent and avoid reinforcing biases (e.g., favouring certain trainers). The system will emphasise insights rather than deterministic predictions to avoid accusations of "inside" manipulation.
- 4. **Animal welfare:** Misuse of video analysis could encourage exploitative training methods. The platform will promote responsible racing and highlight welfare signals.

Collaborations with veterinarians and regulators can ensure that the technology supports injury prevention.

# **Risks and Mitigation**

Risk	Potential impact	Mitigation strategy
Licensing obstacles	Inability to secure race footage and data rights would limit product scope.	Prioritise negotiations with jurisdictions offering accessible rights (UK, Australia) and build value propositions for broadcasters (revenue share, co-branding). Explore capturing our own footage at minor tracks to develop models and proof of concept.
Technolo gical challenge s	Achieving high accuracy in horse identification, especially in crowded fields or poor lighting, may delay product launch.	Begin with limited contexts (e.g., turf tracks with high-quality broadcasts); use data augmentation and manual labelling to improve models; incorporate human-in-the-loop verification during beta testing.
Regulato ry changes	Stricter gambling regulations could reduce betting turnover and punter budgets.	Position the platform as an analytical and media tool rather than betting service; diversify revenue through B2B licensing to broadcasters and training services.
Adoption resistanc e	Professional punters may be sceptical of AI insights or reluctant to share competitive edges.	Involve respected retired jockeys and trainers as ambassadors; provide early adopters with exclusive features; emphasise that the platform complements rather than replaces human judgement.
Competiti on from data-rich incumbe nts	Established betting syndicates and data analytics firms could develop similar products.	File patents on unique aspects of our video editing engine and computer-vision algorithms; move quickly to establish brand recognition and partnerships; focus on user experience and community-building.

# **Go-to-Market Strategy**

- 1. **Initial jurisdictions**: Launch in the **UK** and **Australia**, where racing media rights are relatively accessible and punter communities are active. These markets also share similar language and regulatory frameworks.
- 2. **Beta partnerships**: Partner with a mid-tier broadcaster or streaming platform to pilot the service. Provide value to the broadcaster by offering enhanced content (highlight reels, AR overlays) that can attract viewers and differentiate their coverage.

- 3. **Ambassador programme**: Engage retired jockeys, trainers and respected tipsters to endorse the platform, contribute commentary for video guides and host educational webinars. Their expertise will build credibility and trust.
- 4. **Pricing and trials**: Offer a tiered subscription with a free trial period. Provide discounted rates to early adopters and syndicates that commit to long-term contracts.
- 5. **Content marketing**: Publish educational articles explaining how to interpret sectional times, positioning maps and video patterns. Sponsor podcasts and racing forums. Use social media to share compelling clips that demonstrate the platform's capabilities.
- 6. **Expansion**: After proving traction in initial markets, secure rights in **Hong Kong**, **Japan** and the **United States**. Each jurisdiction will require tailored licensing strategies and potentially local partners. Localising the product (language, currencies) will expand the user base.
- 7. **Strategic B2B partnerships**: Work closely with bookmakers and broadcasters from the outset. For example, partnering with a progressive online bookmaker—among the world's largest operators—could provide immediate distribution, funding and regulatory expertise. Similarly, partnership deals with broadcasters (such as Racecourse Media Group, Sky Racing, Racing.com or international simulcast providers) could allow co-branded products, shared revenue from subscription sales and enriched broadcast content. These relationships accelerate adoption and create B2B revenue streams in parallel with consumer subscriptions.

## **Future Expansion and Vision**

- **Predictive analytics and betting signals**: By combining computer-vision metrics with historical performance data, the platform can develop predictive models to identify value bets. This would complement rather than replace the video guides, giving users quantitative and qualitative insights.
- Animal welfare and training analytics: Leveraging the injury detection work of OneSix, the platform could offer trainers tools to monitor workout performance, detect early signs of fatigue and improve equine welfare. This opens a parallel B2B market with racing stables and veterinary services.
- Other racing codes: Expand the technology to greyhound racing, harness racing, camel racing and even non-racing sports where video analysis yields competitive advantages (e.g., athletics, cycling).
- Augmented reality for fans: Build on Alezan.ai's concept by integrating live AR
  overlays into broadcasts or mobile apps, showing real-time positions, predicted
  finishing times and historical insights during races.

# **Exit Strategies**

Although the founders' intent is to build a sustainable business, investors will seek clarity on potential exit scenarios. Several pathways exist:

1. **Trade sale to a bookmaker or gaming operator** – Major betting groups (e.g., Flutter Entertainment/Betfair, Entain or Hong Kong Jockey Club) might acquire the company

- to enhance their proprietary analytics and customer engagement platforms. Integration with an existing bookmaker provides immediate user base and cross-selling opportunities.
- 2. **Acquisition by a media or data-rights company** Media rights aggregators like Racecourse Media Group or technology providers supplying data to broadcasters may see strategic value in owning an advanced video analytics platform. Such an exit could be structured as a partial sale with ongoing licensing income.
- 3. **Strategic investment or acquisition by a sports analytics firm** Broader sports analytics companies (e.g., Stats Perform, Genius Sports) are expanding into racing and may acquire to expand their product portfolio.
- 4. **Management buyout or initial public offering (IPO)** Should the platform achieve substantial market share and recurring revenue, an IPO or management buyout could provide liquidity while maintaining independence. However, this route requires scale, regulatory compliance and strong earnings.

## **Talent & Expertise Requirements**

Bringing the idea to life requires a multi-disciplinary team. Key roles and expertise include:

- Computer vision and machine-learning engineers Specialists in object detection, tracking and deep learning to develop accurate models for horse and jockey identification.
- **Video processing and software engineers** Developers who can build efficient pipelines for ingesting, editing and streaming large volumes of race footage.
- Sports data analysts and racing domain experts People with deep understanding
  of racing form, sectional times and track biases who can translate raw data into
  meaningful insights and guide model feature selection.
- Regulatory and legal experts Professionals familiar with media rights, gambling legislation and data protection to negotiate licensing agreements and ensure compliance across jurisdictions.
- Business development and partnerships managers Individuals with networks in racing and betting (e.g., relationships with leading bookmakers, trainers such as the Pike family and broadcasters) who can secure B2B deals and distribution channels.
- **User experience designers and product managers** To craft an intuitive interface, manage the product roadmap and balance user needs with technical constraints.
- Marketing and communications specialists To build brand awareness, manage ambassador relationships and execute targeted campaigns for both B2C and B2B customers.

### **Conclusion**

The AI Horse Racing Video Intelligence Platform addresses a glaring gap in the modern racing ecosystem: the lack of dynamic, automated video analysis tools for form study. Supported by market growth projections (CAGR  $\sim$ 7.45 %), substantial global betting turnover and increasing interest in AI-powered sports analytics, the opportunity is significant. By combining computer vision, automated editing and intuitive interfaces, the platform can deliver time-saving insights

and create a new category of racing analytics. With proper execution, strategic partnerships and a focus on responsible innovation, investors can expect meaningful returns and potential for cross-industry applications. The requested funding of  $\pounds 750~k$  will enable development, data acquisition, management recruitment and market entry, laying the foundation for a scalable business that could reshape how punters, analysts and fans experience horse racing.