

Engineering A Scalable, Customizable, And Secure Platform For Sports Betting

Services Delivered: We delivered a comprehensive digital solution for a sports betting platform, tailored to handle the complexities of the betting industry with a focus on scalability, security, and customization.

Background/Business Challenge

The client needed a robust SaaS platform to support multiple betting operators with customizable features, real-time data management, and compliance across various jurisdictions.

- **Demand for a flexible and customizable platform** to enable operators to create branded experiences.
- **Challenges in managing real-time data** for thousands of concurrent betting events and markets.
- **Ensuring high security and compliance** with diverse regulatory requirements across regions.

Solution

Axelerant built a Platform as a Service (PaaS) using a cutting-edge tech stack, including Python for backend microservices and AWS for cloud infrastructure. FastAPI was used for high-performance API development, while Kubernetes ensured scalability through container orchestration. The platform offered seamless integration with existing casino management systems and employed Redis for rapid data access and storage.

- **Dynamic and customizable betting environments** for operators, allowing control over sports and market offerings.
- **Real-time data streaming and processing** to manage odds and betting markets efficiently.
- **Robust security and compliance measures** with encrypted data storage, AWS firewalls, and regulatory adherence through strategic server placement in India and London.

Supporting Evidence

- **99.9% uptime and stability** achieved through multi-region cloud deployment and Kubernetes orchestration.
- **50% reduction in data latency** for real-time betting odds updates and market management.
- **Enhanced user and operator satisfaction** due to unique betting features and seamless integration capabilities.

Results

The platform enabled betting operators to rapidly deploy and manage their branded environments, offering a secure and engaging user experience while maintaining full compliance with regional regulations. The solution's scalability and flexibility increased betting operator engagement and market reach.