viadex
Global IT Service Partner

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Case Study:
NextGen Technology

Viadex migrates and modernises a business-critical sportsbook platform on AWS

About NextGen Technology

NextGen Technology is an enterprise technology provider supporting sportsbook and gaming platforms. Its customer-facing services process real-time betting activity and depend on continuous availability, fast response times and the ability to scale during major sporting events.

The migration programme covered 66 VMware-hosted workloads supporting sportsbook services, player account management, wallet services, odds processing, risk controls, fraud detection and external data integrations.

Industry: Sports Betting and Gaming Technology
Market segment: Enterprise

The Challenge

The sportsbook platform operated from a VMware-based datacenter environment that was increasingly expensive and difficult to scale. Rising VMware licensing, ageing hardware, colocation commitments and refresh requirements increased cost and risk.

The fixed-capacity platform constrained response to peaks in customer demand. Capacity had to be provisioned in advance for major events, creating normal-period overprovisioning and limited peak elasticity.

Without change, NextGen Technology faced continued infrastructure cost escalation, increasing technical debt, slower product delivery and greater exposure to service disruption.

The Solution

Viadex designed a phased programme aligned to the AWS Sports Betting Reference Architecture, combining rehosting, replatforming and targeted refactoring for containerised and event-driven services.

Key capabilities included:

- Amazon CloudFront, AWS WAF and Application Load Balancer for secure, low-latency customer access.
- Amazon EKS for independently scalable sportsbook, wallet, account, odds and risk services.
- Amazon MSK for real-time betting events, odds updates and loosely coupled service integration.
- Amazon RDS and Amazon DynamoDB for resilient transactional and low-latency data services.
- Multi-AZ deployment, AWS Backup and Infrastructure as Code to improve availability and recoverability.
- Amazon CloudWatch, AWS CloudTrail, AWS KMS and IAM controls for observability, audit and security governance.

Migration Strategy

- Rehost selected VMware workloads to accelerate datacenter exit and reduce delivery risk.
- Replatform database, backup and supporting services onto managed AWS capabilities.
- Refactor selected application services onto Amazon EKS and event-driven patterns.
- Validate each migration wave in non-production before controlled production cutover.

Implementation Strategy

The technical rollout was structured into controlled phases:

1. Discovery and dependency mapping

- Validated the 66-server scope, business criticality and application dependencies.

Implementation Strategy *cont.*

2. Landing zone and security foundation

- Established the account, identity, logging, encryption and network-security baseline.

3. Migration and modernisation

- Migrated compatible workloads in waves with rollback and readiness controls.

4. Operational readiness

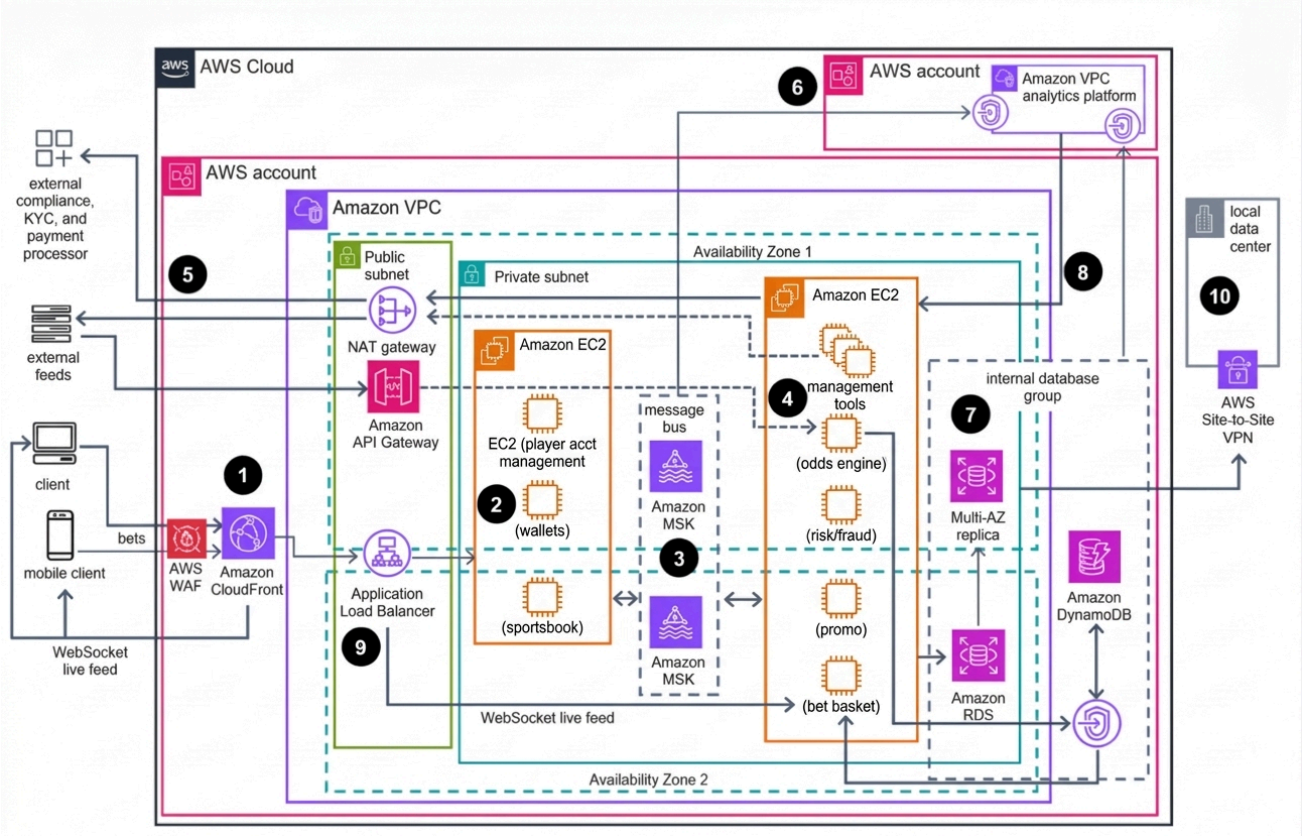
- Implemented CloudWatch dashboards, workload-health alarms and centralised logs.

5. Cost and governance

- Integrated Viadex360 for budgeting, forecasting, allocation and ongoing optimisation without exposing customer commercial data.

Target State Structure

The target design follows AWS sportsbook architecture principles: secure edge services, independently scalable application services, event-driven integration, managed data services and centralised operational controls.



AWS Services and Tools

Migration: AWS Application Migration Service, AWS Migration Evaluator and discovery tooling.

Platform: Amazon EKS, Amazon EC2, Amazon MSK, Amazon RDS, DynamoDB and Amazon S3.

Edge/security: CloudFront, AWS WAF, AWS Shield, ALB, AWS KMS and IAM Identity Center.

Operations: Amazon CloudWatch, AWS CloudTrail and AWS Backup.

Automation and governance: Terraform, AWS CLI, CI/CD pipelines and Viadex360.

Resilience and Scale

- Multi-AZ application, messaging and database components reduce single points of failure.
- EKS horizontal scaling and managed AWS services adapt capacity to changes in demand.

Outcomes

The customer-facing benefits were measured through operational and platform outcomes rather than disclosure of confidential commercial values.

Measure	Result
Migration scope	66 VMware-hosted sportsbook workloads
Scalability	Automatic scaling for changing sportsbook demand
Availability	Multi-AZ application availability improved from approximately 99.5% to 99.95%+
Improved customer experience	Average transaction response times improved from approximately 750ms to below 350ms
Security	Centralized security governance saving approx. 6hrs per week on resource
Financial governance	Saved 15% on datacenter costs with ongoing cost visibility and optimisation through Viadex360

Lessons Learned

Early dependency mapping was critical because sportsbook services interact with payment providers, KYC services, compliance systems and real-time sporting-data feeds. Future programmes now include deeper dependency discovery and application-owner validation before migration-wave planning.

The engagement also reinforced the value of separating migration from modernisation. Moving suitable workloads first reduced datacenter-exit risk, while controlled replatforming and refactoring allowed NextGen Technology to adopt managed AWS services without introducing unnecessary cutover complexity.

Capacity analysis must consider both normal demand and major sporting-event peaks. Viadex now combines historical utilisation, peak-event modelling and post-migration Viadex360 governance to support sustainable performance and cost control.

Why Viadex

Viadex combined migration delivery, sportsbook workload design, AWS operational governance and FinOps capability in one engagement. This enabled NextGen Technology to move beyond a straightforward VMware relocation and establish a scalable, resilient and governable AWS platform aligned to long-term product growth.