GEN AI

GENETICS • PERFORMANCE • INTELLIGENCE

by SPORTOTEAM

Volleyball performance and video analysis platform

One file per player from academy to first team: two HD cameras covering the court, live phone-based court tests and AI-powered devices.

ACADEMY | FIRST TEAM | SPORTS SCHOOL | COACH | ATHLETE & FAMILY

WHAT WE DO

We measure each player's physical profile, track progress and ground decisions in data

01 · WE MEASURE

With camera, phone and devices

Two court cameras, 25 live phone tests and data from VALD, jump sensors and HR straps merge into one athlete file.

02 · WE INTERPRET

By age, position and the individual

Literature-based reference bands, left–right symmetry, jump and shoulder load, readiness score. AI writes a separate commentary on each result.

03 · WE SUPPORT DECISIONS

A screen for everyone

KPI dashboard and academy file for management, daily “reduce / maintain / increase” for coaches, progress report for athletes and families.

Not “How many points?” but “Where did they start? How far have they come?”

HOW IT WORKS

Four data sources, one engine, three screens

Two court cameras

Two fixed HD cameras record games and practices.

Live phone tests

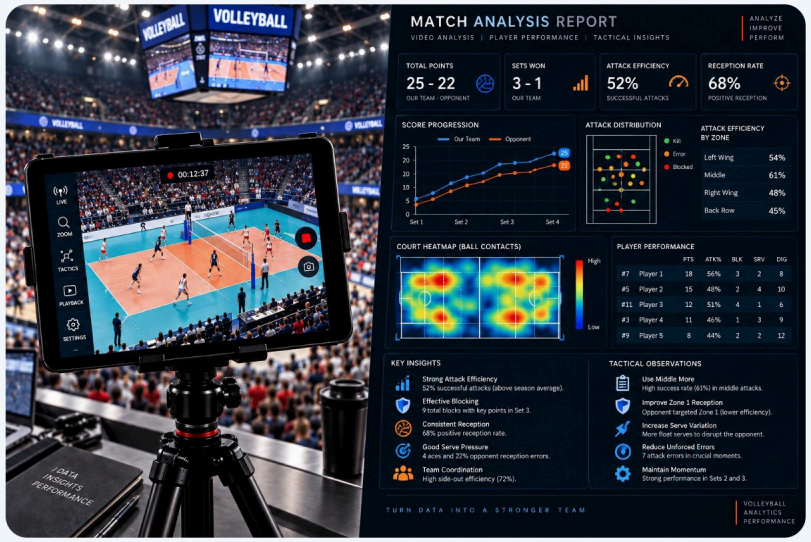
25 court tests; results in about 1 minute via skeleton tracking.

AI-powered devices

VALD, jump sensor and HR strap data are imported automatically.

Morning screening

60-second wellness survey, pupil reflex, medical record.



SPORTOVISION GEN AI engine

Skeleton tracking · court homography · jump & spike counts · reference bands · load & risk engine · AI commentary

Management	KPI dashboard, academy file, monthly summary
Coach	Squad list, shoulder and jump load, performance table
Athlete and family	Personal report, progress curve, daily task

COURT CAMERAS

Two HD cameras watch the court



Full-court recording from a fixed angle above the stands · illustrative image

Court coordinate mapping

Homography fits both views onto one court plan; every player is tracked in meters.

Spike analysis

Approach speed, last-two-step rhythm, jump and contact height, hitting-arm angular velocity.

Block and landing

Block timing and hand penetration; landing asymmetry, knee valgus, single-leg landing ratio.

Jump and shoulder load

Jump count and height per session; shoulder load from spike and serve counts.

AI-POWERED DEVICES

The club's devices connect to the system

VALD

ForceDecks · ForceFrame

- Jump and landing profile from the force plate
- Shoulder IR/ER strength, symmetry
- Data straight to athlete file and strength plan

Jump sensors

Wearable sensors

- Jump count and height per session
- Auto-imported to the load table
- Read together with camera counts

Heart rate straps

Polar · Garmin

- Internal load: practice & game HR
- Heart rate zones and recovery tracking
- Weekly load with RPE

Device if available, camera if not.

Same metric, same reference band, one performance table. Adding a device later never breaks past data; if a threshold changes, the archive is recalculated. AI writes a commentary on every result.

CLUB AND SPORTS SCHOOL MANAGEMENT

What does management see?

WHAT THEY SEE

Command center
Today's status of every age group: ready, at risk, injured; pending tests.

Academy KPI dashboard
Players promoted to first team, development score, practice attendance, retention rate.

Individual development file
Individual development plan, physical performance report, potential score.

Availability
Who is out for how long; injury burden and days lost by team and season.

Monthly board summary
Automatic PDF for the board; comparison across age groups.

Black box
Decision-time data is archived: a documented answer to “why was he fielded that day?”

BENEFIT

- Academy investment and squad decisions rely on data
- Player development is documented; an objective file for first-team and transfer talks
- Days lost to injury become visible
- Transparent, measurable service for families
- Data belongs to the club: GDPR/KVKK, role-based access, audit trail, no lock-in

COACH

What does the coach see?

WHAT THEY SEE

Morning squad list
Green / yellow / red; a “reduce / maintain / increase” tip per player.

Performance table
Jump count and height, spike and serve counts; by position for libero, setter, hitter.

Match day and travel
Readiness score, recovery tracking on the road; ACWR and patellar tendon alerts.

Test results
Value, reference band, left–right symmetry and change vs. last test.

Spike, block and landing
Hitting-arm speed, block timing, landing knee valgus; session-to-session comparison.

Game tagging + video
Tagged moments linked to player clips and the dashboard.

BENEFIT

- Training is individualized per player
- Spots shoulder and knee risk before pain appears
- Jump and shoulder load balanced weekly; automatic prehab plan
- More time on court instead of preparing reports
- Speaks the same language as medical staff and families

ATHLETE AND FAMILY

What do the athlete and family see?

Personal report

Club-branded PDF: 8 domains, radar; figure, table and band for every test.

Progress curve

Percent change vs. the previous result as each test is repeated.

Left–right gap

Comparison of both sides in single-leg jump, landing and shoulder rotation.

Athlete app

Morning wellness survey, video invite, daily schedule.

6 GROWTH BENEFITS

1. The child's physical profile becomes measurable
2. Strengths and areas to develop become clear
3. Left–right differences are tracked
4. Age-appropriate training plans backed by data
5. Retesting tracks progress objectively
6. Coach, medical team and family share one language

⚠ **The goal is not to compare a child with others, but to understand their own profile.** Assessments alone do not definitively predict future performance or injury; results are interpreted alongside clinical status, training history and developmental stage.

OUR LIMITS

What does the system see, and not see?

The camera sees and measures

- Joint angles and skeletal motion
- Jump height (from flight time) and count
- Jump, contact height and arm speed in spikes
- Left–right symmetry and landing knee valgus
- Block timing and single-leg landing ratio
- In-game position, jump count, heat map
- Morning pupil reflex

Doesn't see · we won't claim

- **Muscle activation** → needs EMG
- **True force values** → added via VALD ForceDecks and ForceFrame
- **Heart rate and internal load** → added via HR strap
- **Accuracy on poor footage** → flagged low-confidence, test repeated
- **Certain prediction of the future** → results read with clinical and training history

We never guess what we can't measure. Every report states “measured / not measured” and confidence.



From data to decisions.

Next step: live demo day with an academy age group and the first team · sample athlete file with your data · board presentation