



**INDUSTRY**  
Sports

**TECHNOLOGIES**  
Google Cloud Platform, Google Vision API, Google Cloud Storage

**BUSINESS NEED**  
ECB needed to transition from manual video footage analysis to AI analytics.

**SOLUTION**  
Pythian leveraged the Google Cloud Platform, Pythian AI Opportunity Assessment framework and the Enterprise Data Science team's deep learning experience to experiment with sample data and create an AI roadmap on GCP.

**RESULT**  
ECB has confidence investing in AI solutions on GCP knowing how modeling feasibility and risks stack against potential business value and have clarity on the next steps to take.

## **PYTHIAN CREATES AI OPPORTUNITY ROADMAP TO HELP ECB EFFECTIVELY ANALYZE CRICKET VIDEO FOOTAGE ON GOOGLE CLOUD PLATFORM**

### **BUSINESS NEED**

The England and Wales Cricket Board (ECB) is the single national governing body for all cricket in England and Wales, headquartered at Lord's Cricket Ground in London. ECB was looking at leveraging Artificial Intelligence (AI) to analyze recorded cricket matches video footage.

ECB wanted to be able to analyze more cricket matches than their manual process allowed and be more consistent in the analysis. They turned to Pythian to evaluate opportunities, to assess available data and to establish an AI roadmap to automate video labeling and expand cricket recording footage analysis beyond the capabilities of the human eye.

### **SOLUTION**

ECB enlisted Pythian who had recently helped ECB with a cloud-based data platform that enabled ECB to to unlock the value of their data by integrating disparate data sets for greater insights.

Pythian and ECB then turned to Google Cloud Platform because of its Machine Learning (ML) capabilities and cloud elastic compute and storage capacity that enables the assessment of large samples of sports game video footage, including televised footage, analyst-recorded footage, and specialized Hawk-eye captures for multi-dimensional ball trajectory analysis.



Pythian analyzed samples of recorded matches and associated historically labeled events and its attributes, such as start of the delivery, overs, runs, wicket type, ball line and length, to assess suitability for ML solutions and applications of Google Vision API and TensorFlow-based deep learning models.

| Use Case | Potential Value | Weighted Risk Reward Ratio | Weighted total risks |
|----------|-----------------|----------------------------|----------------------|
|          | ***             | 0.95                       | 1.90                 |
|          | ****            | 0.68                       | 1.70                 |
|          | *****           | 0.75                       | 2.25                 |
|          | ****            | 0.60                       | 1.50                 |
|          | ***             | 0.95                       | 1.90                 |
|          | *****           | 0.73                       | 2.20                 |
|          | ****            | 0.74                       | 1.85                 |
|          | ***             | 0.90                       | 1.80                 |
|          | ***             | 0.63                       | 1.25                 |

AI Opportunities Risk/Reward Matrix

**ABOUT PYTHIAN**

Pythian is a global IT company that helps businesses leverage disruptive data technologies to better compete. Our services and software solutions unleash the power of cloud, data and analytics to drive better business outcomes. Our 20 years in data, commitment to hiring the best talent, and our deep technical and business expertise allow us to meet our client promise of using technology to deliver the best outcomes faster.

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