

# PvX Partners

Case study on how KeyValue built a financial services platform providing non-dilutive capital to support user acquisition strategies for gaming companies

Report Type:  
Case Study

Domain:  
Investment

Market  
 Singapore



# Problem Statement

Build an intelligence & insights platform to understand the performance of all invested companies on a daily basis. This should enable PVX to monitor everything from marketing performance, revenue, and all other KPIs & business metrics of the invested companies that really matter. The platform uses predictive modelling and advanced machine learning models to forecast future performances, aiding proactive decision-making for PVX.

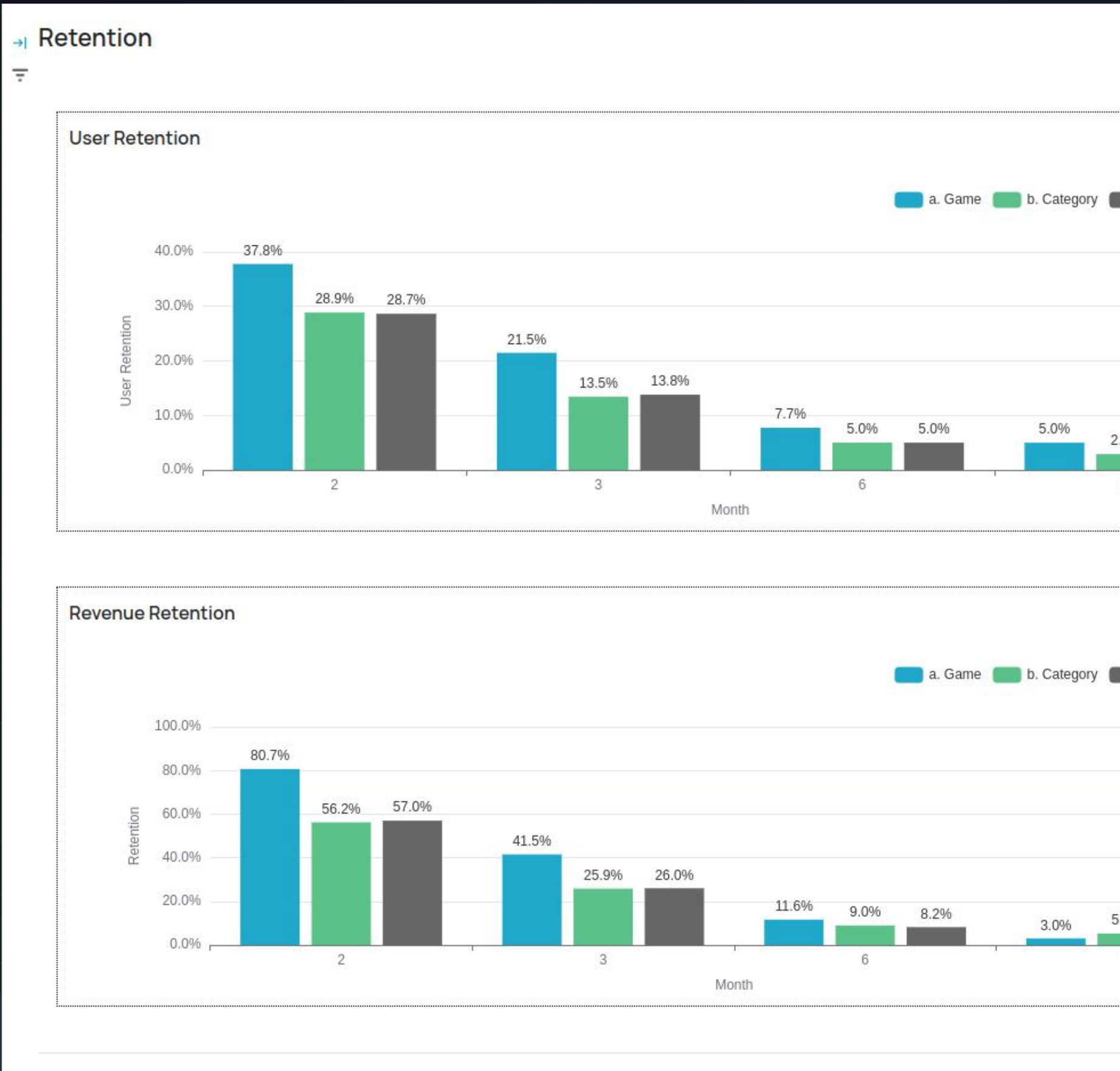
- Underwriting
- Benchmarking
- Visualisation
- Monitoring
- Data Lake

**PvX Partners**

- Underwriting (Admin)
- Underwriting Reports
- Financing Reports
- Investment Performance
- Data Co-Op (Demo)
- Benchmarks**

Users 18

Vimal V



# Key Metrics

**50+**

Different games

**350+** Charts to  
visualise data



**800GB**

Processed in 10  
minutes.



**2M+**

Transactions per  
game

**60+**

Data pipelines

**10+** Data sources



# Business Impact

## Improved Investment Decisions

Enabled PvX Partners to make data-driven underwriting and monitoring decisions, reducing risk and enhancing investment outcomes.



## Predictive Capabilities

Established a robust data foundation for machine learning models to forecast future performances, aiding proactive decision-making.



## Operational Efficiency

Automated data workflows with minimal manual intervention, lowering operational costs and errors.

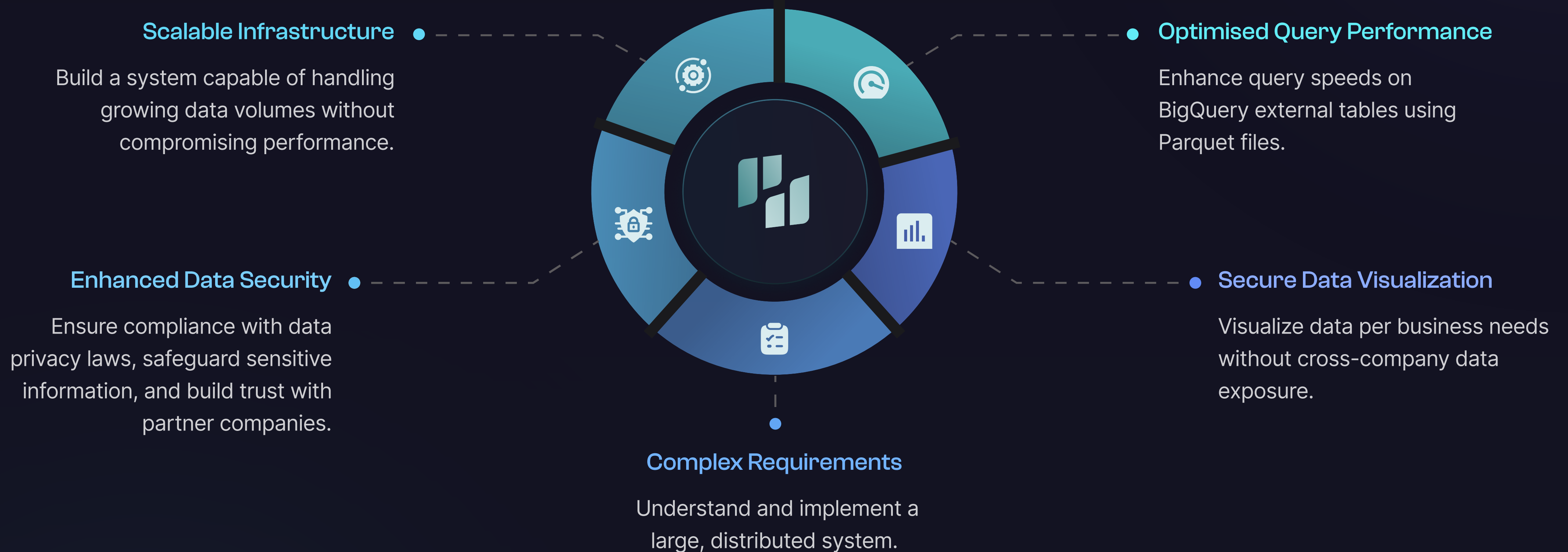


## Competitive Insights

Provided companies with benchmarking tools to gauge performance against industry peers, fostering strategic growth.



# Challenges



# Implementation

## Orchestration

Implemented Apache Airflow (self-hosted) for job scheduling to reduce costs.



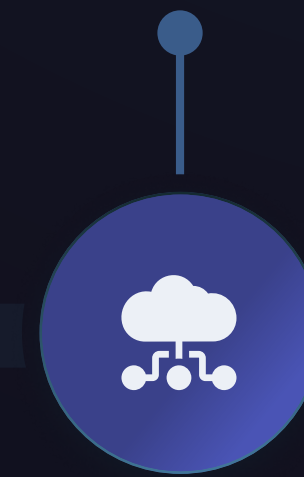
## Query Optimization

Partitioned Parquet files on frequently filtered columns to minimize data scanning.



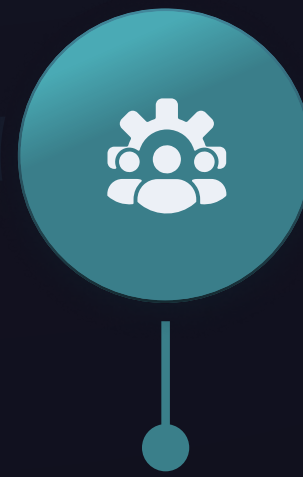
## Cloud Platform

Chose Google Cloud Platform (GCP) for its services like Dataproc, GCS, BigQuery, and Vertex AI.



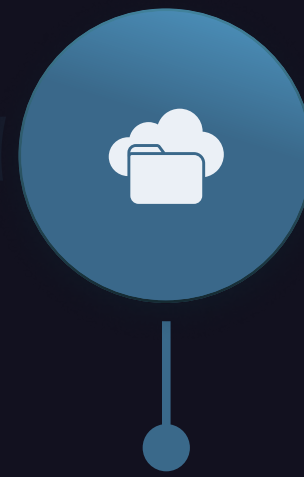
## Spark Job Management

Employed Dataproc batches for serverless, auto-scaling Spark jobs triggered as needed.



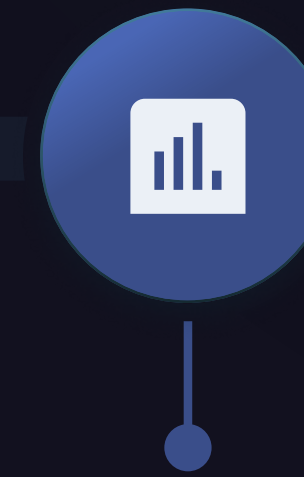
## Data Storage Format

Used Parquet format in Google Cloud Storage (GCS) and added as external tables in BigQuery for querying.



## Data Visualization

Adopted Apache Superset (self-hosted) for its extensive chart options and ability to handle data security with roles, permissions, and row-level security.



# Technology Stack

