



Telecommunications

Global Telecom Leader Achieves **£45M+ Cost Savings** Through GCP-Led Automation Framework

A global telecommunications leader, operating in over 180 countries with nearly 100,000 employees, wanted to modernize their data operations infrastructure. Manual processes in voice recording validation, recruitment tracking, invoice reconciliation, and tactical data ingestion were impacting scalability and driving unnecessary costs.

Highlights

- The client required a scalable data framework that could integrate sensitive telecom workloads, real-time analytics, and automation to replace fragmented, manual workflows.
- iOPEX implemented comprehensive Google Cloud Platform solutions, including Kafka-based streaming, BigQuery analytics, and automated workflows through Google Cloud Functions.
- The engagement delivered substantial cost savings, eliminated £200K in annual penalties, and established a secure, scalable infrastructure ready for AI-driven insights.

Business Challenge

As part of its global transformation agenda, the client sought to eliminate operational inefficiencies, enhance compliance, and facilitate faster decision-making across its business units. Key priorities included:

Mobile Voice Recording Validation

Manual compliance verification processes created security vulnerabilities when handling sensitive user information, increasing risk exposure and operational overhead.

Recruitment Tracking

The absence of real-time hiring analytics hindered efficient workforce planning, leading to extended hiring cycles and reduced operational capacity.

Invoice and Inventory Management

Manual reconciliation processes resulted in significant financial leakage due to unidentified discrepancies, aged accruals, and unnecessary late payment penalties.

Tactical Data Processing

Time-consuming manual updates to business intelligence dashboards delayed strategic decision-making and reduced responsiveness to market changes.

The strategic intent was to reduce overhead, eliminate manual errors, and prepare a robust cloud-first data foundation.

iOPEX Solution

iOPEX designed and deployed a comprehensive data transformation solution centered around their proprietary Data Platform, implementing a phased approach to ensure business continuity:

Strategy and Planning

- Conducted a thorough assessment of existing data workflows to identify automation opportunities and determine optimal GCP solution components
- Developed a secure migration plan that maintained business continuity throughout the transformation process
- Created a phased implementation roadmap to deliver incremental value while minimizing operational disruption

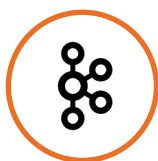
Implementation and Integration

- **Mobile Voice Recording Validation:** Engineered a Kafka-based real-time streaming architecture that processed call data while tokenizing sensitive information before consumption, ensuring regulatory compliance while maintaining data security.
- **Recruitment Tracking:** Developed comprehensive KPI dashboards leveraging BigQuery analytics and Qlik visualization to provide real-time hiring insights, complemented by automated workflow orchestration through Google Cloud Functions.
- **Invoice & Inventory Management:** Designed automated reconciliation processes that identified discrepancies, resolved aged accruals, and eliminated unallocated costs through intelligent matching algorithms and exception handling workflows.
- **Tactical Data Processing:** Created an automated ingestion pipeline utilizing Google Cloud Functions that enabled seamless data updates from business sources to dashboards, removing manual intervention requirements.

Solutions Deployed



Google Cloud Platform (GCP) suite of services



Kafka for real-time data streaming



BigQuery for large-scale data analytics



Qlik for data visualization and dashboard creation



Google Cloud Functions for serverless automation

The Impact

The implementation of the GCP-powered transformation delivered substantial, quantifiable business value across multiple operational dimensions:

£10M Cost Savings in Hiring Operations

By eliminating manual tracking inefficiencies by 60% and optimizing recruitment workflows.

Cleared £35M in Financial Liabilities

£15M in invoice discrepancies and £20M in aged accruals resolved.

£200K in Annual Penalty Avoidance:

By eliminating manual tracking inefficiencies by 60% and optimizing recruitment workflows.

30% Reduction in Unused Subscriptions

Optimized mobile voice recording usage via real-time data insights.

Full Dashboard Automation

Shifted from manual refreshes to intelligent data syncing, reducing lag and improving decision readiness.



About iOPEX

iOPEX Technologies is a new-generation agentic AI and automation-led enterprise transformation solution provider headquartered in San Jose, California. At the intersection of enterprise operations, agentic AI, and intelligent automation, we deliver rapid results that enable businesses to enhance efficiency and accelerate revenue growth without endless timelines. Over 70 global brands trust iOPEX as a strategic partner to break down complex transformations into manageable steps, deliver practical AI-led solutions, and achieve results that scale. Contact us at marketing@iopex.com.

