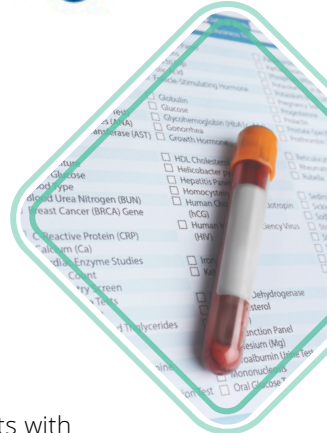


CASE STUDY



Public Sector Healthcare Department

AI-Powered Document Workflow Automation Solution

About Us:

As a trusted Google Cloud Partner, Improving is committed to providing our commercial and public sector clients with transformative services and solutions on Google Cloud Platform (GCP). With our expertise in open-source technologies, Improving's Google Cloud team has been instrumental in developing and delivering best-in-class services and solutions that have had a profound impact on how our enterprise and public sector clients have navigated their digital transformation journeys. Our expertise on Google Cloud Platform spans a range of AI/ML & GenAI, data analytics, platform engineering and application development services, with a focus on providing our clients with a secure, scalable, and strategic pathway to the cloud.

Overview:

Our public sector healthcare department client faced significant challenges in managing the inflow of medical device reporting forms, which were manually processed. Improving developed an Automated Medical Device Reporting Solution to streamline and automate the entire data ingestion and processing workflow.

Business Problem:

Our client was overwhelmed by the manual processing of medical device reporting forms, leading to inefficiencies and potential health risks. The lack of standardization and the manual nature of the process created inefficiencies, increased the risk of human error, and delayed the detection of potential health risks.

Our Solution:

We developed an AI-powered automated system using a combination of a front-end web application, back-end systems, and machine learning models. By implementing Google Cloud services and integrating Document AI and AutoML, we created a solution that could handle vast amounts of data efficiently. The system included an interface for analysts to review automatically extracted data and provided an API endpoint for seamless integration with the public sector healthcare department's existing systems.

Business Benefits:

- Enhanced efficiency, reducing form processing time from weeks to hours.
- Improved accuracy in data extraction, reducing human error.
- Scalable solution to handle increasing data volumes.
- Cost savings by reducing the need for temporary data entry personnel.
- Ensured regulatory compliance with data protection regulations.
- Improved data-driven insights for problem resolution.

Technologies & Methods Used:

- Google Cloud Platform
- Document AI
- BigQuery
- AutoML
- API Integration
- Agile Methodology



Partnerships:

The project's success relied on close collaboration with Google Cloud's public sector customer engineering team and the Document AI product team. Partnering with iFathom facilitated the contracting and procurement processes.

Conclusion:

Improving's automated solution for our healthcare department client transformed a cumbersome and error-prone manual process into a streamlined, efficient, and scalable workflow. Leveraging machine learning and cloud technologies, we significantly reduced processing times and improved data accuracy, enhancing our client's ability to monitor and respond to medical device issues quickly.