Automated Data pipeline created to meet BI Visualisation needs

Opennetworks advised the client on the unified data stream visualisation opportunity. Opennetworks then automated the tipper and tippee data collection into cloud storage and utilised BigQuery and Looker Studio for simple and user friendly reporting.

The challenge

The client wanted an easy-to-manage secure, unified view of all different data streams for business to assess the best future strategy for their client (Tippee's) support. Weekly reports are received to a Google Workspace email from the payment merchant, containing sensitive personal data. The Tip4change tech platform also exports Tippee data from a different cloud provider in .csv format.

The solution

A data pipeline was created. Utilising Appscript, scheduled to run weekly, utilising Cloud Scheduler, Pub/Sub, Cloud Functions and CloudRun, the weekly payment reports are now automatically added to a drive folder. From the drive folder the data is written to BigQuery, and connected to Looker Studio. Data is blended from additional custom updated Sheets to create the required reports.

The result

A simple automated pipeline and secure back up of all information from many sources is now available in Cloud Storage. BigQuery and Google Sheets connecting to Looker Studio provided easy to read reports, blending data and the ability to create a full BI picture for the client. The repeatable Appscript, shared, allows the client flexibility to add further automated data streams in the same way.

The process from start to finish was surprisingly fast. We were able to automate our current data journey pipeline from receiving reports via email into a back up, and on to reporting. We are already saving time through simpler processes - and believe this will continue as the data quantities we are handling grow. We are delighted.

Patrick Schofiled, Director



About Tip4Change

Tip4change is a platform that connects South African service attendants to their potential tippers, using simple, available technology that makes it easy to express or receive gratitude - even when tippers hold no physical cash.

Vertical/horizontal solution: Financial Services Primary project location: South Africa



About Opennetworks (Pty) LTD Opennetworks has 23 years of experience supporting customers in their Google Cloud Platform and Google Workspace journeys.



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