

A photograph of a Black man in a dark suit and light blue shirt, wearing white earbuds, looking down at a smartphone. He is holding a yellow vertical handrail with his left hand. The background is a blurred interior of a public transit vehicle, likely a train or bus, with other passengers visible in the distance. The image has a blue gradient overlay at the bottom.*Resultant*

Public Transit Client Engages Resultant to Help Mature Their Data Pipeline by Migrating Data Warehouse to the Cloud

THE PROBLEM

A global leader in urban mobility technology approached Resultant for services including providing a Tableau Server assessment, providing recommendations, upgrading their production environment, and continuing server maintenance and support.



OUR APPROACH

Spending extended time with our team gave the client deeper insight into the challenges they faced, and they looked to Resultant to provide further guidance supporting their need for data improvements and visual analytics enhancements.

Because our first recommendation was to migrate their data to a cloud-based data warehouse to make their data storage solution lighter, faster, and more agile, our team provided an extensive demo of the cloud-based data warehouse platform Snowflake, which convinced the client to make the move to the cloud.

We also recommended they:

- Make data system cloud-based and lighter
- Use Matillion to handle ETL/ELT processes
- Build a suite of Tableau dashboards to better present truths buried in their data



THE SOLUTION

A senior data architect leveraged Matillion, a best-of-breed cloud-native data transformation tool, to accomplish:

- ✓ Developing load tables and data sources
- ✓ Defining calculations and business rules
- ✓ Building dimensions and fact tables
- ✓ Configuring permissions and security (environment, data, source system, warehouse, role-based, etc.)
- ✓ Enacting job auditing, notifications, and scheduling
- ✓ Establishing an iterative, well-tested process for adding new client data
- ✓ Implementing a multi-tenant system that follows data warehousing best practices
- ✓ Creating security tables and views

We built numerous transit detail dashboards in Tableau that connected to the cleansed and consolidated data source built through Matillion in Snowflake. They were published to the recently upgraded Tableau Server for ease of accessibility. This suite of dashboards currently provides the client with further visibility into the details and aspects of their data as a whole.

OUTCOMES AND IMPACT

With the help and guidance of only two members of the Resultant team, the client was able to set up an enterprise data warehouse for internal use smoothly and quickly within a month.

The power of Matillion shone through by enabling the client to create one workflow that generated individual secure share views per customer in order for the client to have visibility and access only to their own data.

- New clients can be added via a simple control table, making the process extremely scalable and sustainable.
- Changes can be made quickly and efficiently to all customers at once without any duplication of effort.
- Adding new customer data, which sometimes took the client more than a week to complete, could now be accomplished within a matter of minutes.

Employing Matillion to successfully handle this arduous yet crucial process with minimal effort saves employees significant time, freeing them to focus their efforts on the more human-centric tasks of growing the business.

Tableau enables the client to easily consume their parking and transit data and perform comprehensive visual analytics through the creation and maintenance of customizable dashboards. The stories told by the interactive and informative graphs and charts within these dashboards empower the client to ultimately make better data-driven business decisions.

