Punter Southall Analytics

How does Punter Southall Analytics Build an Automated Data Warehouse for Every Single Client?

Industry: Financial Services

Location: London, England

Employees: 9,000

Solutions:
WhereScape® 3D
WhereScape® RED
SQL Server
Azure DW

Highlights:

- Fully documented data warehouse build down from 12 weeks to one

- Able to keep and automate existing infrastructure

- Network of bespoke client data warehouses run from central data warehouse

- Prototyping of designs done with WhereScape 3D before build takes place

"With WhereScape I can get a data warehouse up and running with lineage and all the other good stuff in a week or two."

—**Steven Lim**
Head of Analytics at PSA

Introduction

Founded in 1988 and based in London, Punter Southall Group (PSG) work with pension schemes, employers, insurers, charities and private clients to provide expertise in wealth management, workplace savings, health and protection, and financial data.

Challenge: Quickly add lineage and documentation to client data warehouses

Punter Southall Analytics (PSA), a subsidiary of PSG, brings transparency to card payment data with the aim to enhance service quality, while ensuring regulations and compliance (PSR, PSD2 & SEPA) that apply across sectors such as airlines, retail and gaming. For most companies, building and maintaining one data warehouse for their own data is already a huge challenge. At PSA, they have to create a bespoke data warehouse for each of their customers.

PSA's business goals are to:

- Enhance cardholder payment experience by improving acceptance rates (higher revenue)

- Improve loyalty schemes and programs (sustained revenue)

- Manage the cost of interchange fees, scheme fees and foreign exchange (lower cost)

- Manage risks such as disputes, chargebacks, fraud and collateral management (lower risk)

- Manage future and/or global payment strategies such as localized or alternative payments like mobile or e-Wallets etc. (futureproofing)

Steven Lim, Head of Analytics at PSA, explains how his company achieve these targets: "My challenge is that I'm not just building a data warehouse for my organization. Our value proposition is that we build a data mart or data warehouse for each client."

While creating the architecture can be a long-winded process when done by hand, adding the lineage and documentation needed to satisfy customer and regulatory demands represents a huge amount of extra work. "When building each data warehouse, it typically takes two to three weeks just to get your head

Steven Lim, Head of Analytics at PSA

around the data. To add good data management on top such as audit trails, documentation, data lineage/tracability, that could easily add three months to the project. The challenge was that we were doing bespoke development, and we have to ingest and process lots of transactions, but we didn't have the tools to support these processes."

Steven realized he needed an automation tool to create infrastructure, lineage and documentation, and for the change management of such complex, dependent structures containing sensitive data. The bespoke architecture PSA uses meant he was looking for an agnostic solution.

"We needed traceability and lineage, but we also needed to leverage the existing cloud infrastructure. It was important to see how a transaction got changed, and if something was changed we needed to know why the code changed to this versus this. We also wanted to see when we ran each job, each transformation."

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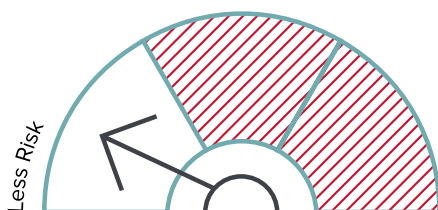
Solution: a platform agnostic, tried-and-tested automation tool

PSA had a specific list of questions that needed answering within a proof of concept trial:
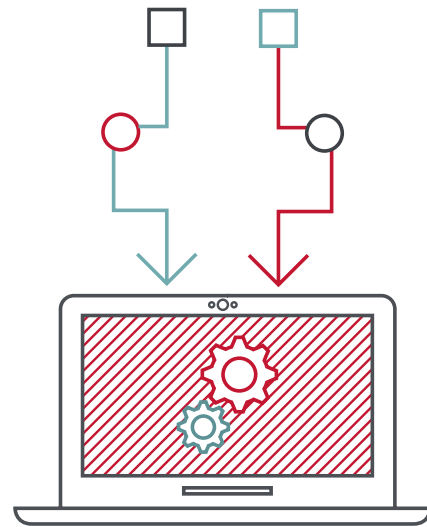
- Does it meet compliance and auditing needs?

- Can it shift big amounts of data into and out of the Microsoft Azure data warehouse quickly?

- Are transformations quick enough?

- Can we see how things get transformed between the load stage and then ultimately the data warehouse area in the lineage?

"The POC was turned around in three days with minimal preparation required, and the performance met my expectations. I wanted to see it was generating code onto Azure, more to test the Azure platform than the WhereScape tool. I also wanted to check the metadata was written correctly and so on."

Steven chose WhereScape because he already knew what the software could do. Like many new WhereScape customers, the champion behind the initiative had used WhereScape with such success at hid previous employer that he wanted to replicate this transformation again at his new company.

Utilising the existing infrastructure.

"I've been in the data warehousing game for 20 years, so you name it, I've used it all: your data stage, ETL, data appliances, messaging bus and so on, but they require significant investment. I had the pleasure of working with WhereScape when the company started in 2000, so I know the principles behind the software. I was one of their first customers in fact.

"This is the only package that allows you to utilize existing infrastructure. It's a code generator that doesn't need you to buy its own appliance or database. It follows a methodology that allows your whole development team to speak the same language, using the same standard of code. In short, it allows us to scale quickly with less risk"

—Steven Lim
Head of Analytics at PSA

Enabling to scale quickly with less risk.

Results: 12x faster, fully documented builds

PSA can now create a bespoke data warehouse, using ingested data, 12x faster with WhereScape automation than they could with hand-coding.

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After WhereScape had proved its worth in building and maintaining data warehouses, Steven discovered a new tool had been added since he last used the software. WhereScape 3D allows data architectures to be designed, prototyped and shown to business users before the build takes place, saving potentially weeks of work done in error.

"The WhereScape 3D tool allows us to look into any system to gain a quick understanding of what it contains. Earlier this year my MD was getting significant pressure from our internal GDPR team as the May deadline loomed, and there were systems which were poorly documented. With WhereScape 3D we could generate full documentation of the systems and see a full audit trail of the data they contain. We managed to get two systems fully documented in less than 30 minutes."

—**Steven Lim**
Head of Analytics at PSA

About WhereScape
WhereScape helps IT organizations of all sizes leverage automation to design, develop, deploy, and operate data infrastructure faster. More than 700 customers worldwide rely on WhereScape automation to eliminate hand-coding and other repetitive, time intensive aspects of data infrastructure projects to deliver data warehouses, vaults, lakes and marts in days or weeks rather than in months or years. WhereScape has global operations in the USA, UK, Singapore and New Zealand.

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