WhereScape®

Investec Banks on WhereScape for *Data Warehouse Modernisation*

Investec

Industry:
Banking and Finance

Location:
Johannesburg and London

Employees:
8,700

Solutions:
WhereScape® 3D,
WhereScape® RED,
Microsoft SQL Server,
Microsoft Azure Synapse

Modelling Styles:
Dimensional Modelling,
Data Vault 2.0

Highlights:

- Repetitive, mundane tasks automated

- WhereScape used as basis for company-wide Cloud migration project

- Switch from Dimensional Modelling to Data Vault enabled

- Use cases usually taking 4-6 weeks solved in 1.5 days on proof of concept

- Entire data ecosystem documented with one click

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Daniel Seymore, Head of BI,
Investec, South Africa

About Investec

Investec is an international banking and wealth management group. It was founded in South Africa in 1974 and entered the UK in 1992. The company provides a range of financial products and services to a client base in Europe, Southern Africa, and Asia-Pacific.

The company is planning a global data warehouse modernisation initiative with WhereScape at its core. This case study tells the story of how Investec adopted WhereScape for a specific use case and have since come to realise its potential for modernising the company's data ecosystem worldwide.

The Challenge

Investec aims to move from opportunistic BI to a long-term vision based on a consistent, fully-documented framework. The company is preparing all its data for an eventual move to Microsoft's cloud data warehousing platform, so everything the data team does now must be portable to the Cloud. The company also wants to switch to Data Vault 2.0 modelling for greater agility and a global view of its data ecosystem.

The first stage of four on the roadmap is data acquisition – to consolidate data as quickly and efficiently as possible through automated processes. Then comes self-service, decisionsciences and eventually artificial intelligence.

This first consolidation step was expected to take the most time. Many new systems needed onboarding, which usually involves building data pipelines manually with much orchestration work and many columns to be added. In banking there are a lot of pre-defined standards that are already in use, and Investec needs to integrate with those components.

Investec has structured and unstructured data. The team wanted to ensure the process it uses to ingest that information is standardised and that they can link to a multitude of data sources. Documentation also took a lot of time and was frustrating for developers. Investec wanted to make it easier to attain a reliable record of all development work done, and to establish a framework with set standards, as part of their overarching data warehouse modernisation project.

The Solution

Daniel Seymore, Head of BI for Investec's Private Banking arm in South Africa, began reviewing Data Automation software to accelerate his team's data acquisition work. Daniel understood that staff might initially resist the idea of automating some elements of their jobs, so he made sure to involve them in the decision-making process.

He engaged South African BI experts Slipstream Data, who recommended an upcoming WhereScape Test Drive event in Johannesburg. This would give Investec's techies the opportunity to try out WhereScape for themselves in a hands-on lab, and build a fully documented data mart in just two hours.

The event demonstrated that rather than coding by hand, the team could design data models with a drag-and-drop GUI and use WhereScape RED to write the underlying code at the click of a button, enabling them to do weeks of development work in hours. Rather than replacing their roles, WhereScape made the developers more productive and they retained full control. Investec's analysts could also see how much of

the design work could be done with WhereScape 3D to expose the data models as required.

The Investec team invited two WhereScape Senior Solutions Architects to its office for a proof of concept, and presented four use cases that should have taken four to six weeks to solve. The data modelling work was to be completed on two host applications, a customer information system and a rewards system, with structured and semi-structured data. The Investec team made sure they didn't tell WhereScape architects much about how to piece the two applications together.

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The Results

Investec's data acquisition project has accelerated noticeably since the team onboarded WhereScape. The repetitive hand coding work is now automated, enabling the staff to focus on more enjoyable tasks in areas where they can add most value.

"The nice thing about it is our code base is now well structured and understood. We use the templates, so no-one needs to go and manually change or restructure the data. This really helps to speed up delivery to get to the value-add activity. WhereScape enables you to focus on model design and optimisation, because now you actually have the time. The build is the easy part, it's the design that's going to take most of the time."

In the past, changes to the architecture would take a lot of time because of the intricate refactoring work required, as would testing because of the multiple iterations involved to test certain environments.

"Automation enables us to quickly change the approach if we need to. In the past it took a long time to unwind a development, refactor and move to another approach. With Wherescape it is much simpler and quicker. It really helps to test out multiple iterations in a short time. We now onboard new applications in a week, which is 5x faster than before WhereScape.

"Automation is not an instant silver bullet and does not replace developers. You still need to understand the data structures, and spend time modelling. You need people with enough experience in the data world to

understand what the tool is doing. However, once you understand the tool, the pace at which you can deliver makes it a silver bullet. It is perfect for removing repetitive mundane tasks."

After onboarding WhereScape for a specific use case, Investec's BI team were sufficiently impressed with the software to roll it out for a group-wide project. The ODP (One Data Platform) project aims to migrate everything that's currently sitting on-premises at Investec into Azure Synapse. Investec sees WhereScape as the enabler and accelerator for the large amount of data modelling work that will need to be done to make the project work. The company is switching from a Kimball Dimensional Model to a Data Vault 2.0 architecture.

Daniel explains: "We want to migrate everything that's sitting on-premises within Investec onto Azure. This kind of refactoring is a monolithic task that usually takes years to accomplish. We see WhereScape as the key software to enable this migration.

"WhereScape gives us one framework and one way of delivering the entire architecture on Azure."

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WhereScape®
Data Automation

For more info, visit
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