# REPORT REPRINT

# WhereScape has designs on Total Data Warehouse automation

# MATT ASLETT

#### 13 OCT 2016

The DWA specialist is seeing increasing demand for its data-warehouse design and development software on Apache Hadoop, complementing its existing support for a variety of analytic databases.

THIS REPORT, LICENSED EXCLUSIVELY TO WHERESCAPE, DEVELOPED AND AS PROVIDED BY 451 RESEARCH, LLC, SHALL BE OWNED IN ITS ENTIRETY BY 451 RESEARCH, LLC. THIS REPORT IS SOLELY INTENDED FOR USE BY THE RECIPIENT AND MAY NOT BE REPRODUCED OR REPOSTED, IN WHOLE OR IN PART, BY THE RECIPIENT, WITHOUT EXPRESS PERMISSION FROM 451 RESEARCH.



©2016 451 Research, LLC | WWW.451RESEARCH.COM

WhereScape is one of a few specialists in the field of data-warehouse automation (DWA), providing design and development software for automating the creation of data marts and data warehouses. Traditionally, the results have been deployed on analytic relational databases, but the company is seeing increasing demand for Hadoop-based deployments, having introduced native connectors for the Hadoop Distributed File System (HDSF) and Hive about a year ago.

# THE 451 TAKE

The analytic data platform market is evolving. While the term 'data warehouse' is almost synonymous with analytic databases, it has been clear for some time that at least some data-processing workloads are being migrated from existing analytic databases to Hadoop. We have called this hybrid data management landscape the Total Data Warehouse, and it is clearly a concept that has the potential to drive growth for WhereScape given its early embrace of Hadoop. The company is well-established as a provider of data-warehouse automation software for analytic databases, and while those account for the bulk of its revenue, we see opportunities for growth based on bringing the benefits of DWA to Hadoop.

# CONTEXT

WhereScape can trace its lineage back to the formation of data-warehousing consulting firm Profit Management Systems in 1997, but the company as we know it today came into being in 2001 with a change of name to WhereScape and a shift of focus to data warehouse-automation software.

Headquartered in Auckland and with offices in Beaverton, Oregon, as well as the UK, Singapore and India, the company has been led from day one by cofounder and CEO Michael Whitehead, who previously held sales and managerial roles at Sequent, Oracle and Data General. WhereScape has roughly 150 employees and is backed by Pioneer Capital, which provided an undisclosed investment in two tranches in late 2013 and late 2014.

The company boasts over 750 paying customers (excluding OEM partners such as Teradata and QAD), with about 400 of those based in the US and the rest spread across Europe and Asia. Named clients include Tesco and Body Shop in retail; Nordea and UnionBank in financial services; Vodafone in telecom; MGM in entertainment; and Volk-swagen Commercial Vehicles in transportation. Other key industry sectors include advertising, government, utilities, healthcare and manufacturing.

While WhereScape offers professional services to help customers with their data-warehousing projects, the majority of its revenue is generated by its two DWA software products: WhereScape RED and WhereScape 3D. The bulk of software deployments are associated with data warehouses employed on analytic database products from the likes of Oracle, Microsoft, IBM, Teradata and Pivotal, but the company is seeing growing interest in Hadoop-related deployments since it delivered native connectors for the HDFS and Hive in October 2015.

# PRODUCTS

The company's flagship product is WhereScape RED, which is a data-warehouse planning and integrated development environment that provides an approach to designing the data warehouse that is driven by the data itself, rather than conceptual models. The software is installed on the target data platform – analytic databases or Hadoop – and takes advantage of the data-processing capabilities of the underlying platform to extract and load data from external sources (typically operational databases) and then transform it as required.

Based on the user's design, WhereScape RED automatically generates the code to create the data warehouse, resulting in significantly lower time taken on data-warehouse model development (the company cites 80%), as well as reducing the need to license and maintain separate ETL tools. Since all generated code and transformations are stored as metadata, users can theoretically take the created data warehouse from one analytic database and port it to another. While this is fairly rare – enterprises generally don't move data warehouses around – there are some examples of customers doing just that. In addition to WhereScape RED for developing and building the warehouse, the company also introduced WhereScape 3D in 2011 as a complementary data-warehouse and BI design and test tool. WhereScape 3D enables users to create and test logical data models – again based on real data – before sending the results to WhereScape RED to automate the creation of the physical data warehouse.

WhereScape RED and WhereScape 3D are sold separately and while larger clients typically use them in combination, smaller customers without data-modeling skills may prefer to simply build out the data warehouse using WhereScape RED (which can also import models generated using data-modeling tools such as ERwin Data Modeler). In October 2015, WhereScape also introduced native connectors for HDFS and Hive data warehousing, and while the majority of clients are still experimenting with building data warehouses in Hadoop, the company reports that maybe 20% are actually using it, mostly for offload projects.

#### COMPETITION

WhereScape is one of a handful of vendors that have focused their attention on data-warehouse automation over the years. The primary competition comes from TimeXtender, which is specifically focused on Microsoft SQL Server-based projects, but has some substantial growth ambitions nonetheless; as well as Attunity with Compose, which was relaunched earlier this year and combines the BIReady DWA assets that it acquired in late 2014 with the data-loading and change data capture capabilities of its existing Replicate offering. Magnitude Software is also a direct rival with its Kalido DWA software.

The wider competition comes from a reliance on more traditional ETL tools from data-integration providers such as Informatica, IBM and Talend, as well as data-warehouse consultancies using manpower (and racking up billable hours) to deliver the same functionality automated by DWA specialists. Despite the potential benefits of data-warehouse automation, it has always been something of a niche market, and to some extent it could be said that the greatest competition for all DWA vendors is a reliance on established people and processes.

# SWOT ANALYSIS

#### STRENGTHS

WhereScape has clear expertise when it comes to data warehousing, and specifically data-warehouse automation, and is a well-established player that can boast strong partnerships with the major analytic database providers.

#### **OPPORTUNITIES**

The company is ahead of its direct competitors in terms of embracing Hadoop, which could work to its advantage as enterprises look to offload data-warehousing projects from analytic databases to potentially cheaper Hadoop environments.

#### WEAKNESSES

To date, data-warehouse automation has been something of a niche market, meaning that the company has to evangelize its approach with potential new customers.

#### THREATS

As perhaps the best known of the DWA vendors, WhereScape is a prime competitive target while, like its direct rivals, it must compete with a reliance on more traditional ETL tools, as well as established processes.



NEW YORK - BOSTON - SAN FRANCISCO - WASHINGTON DC - LONDON