

TimeXtender extends beyond data warehouse automation with Discovery Hub

MARCH 28 2017
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TimeXtender is best known as a provider of data warehouse automation (DWA) software, but since mid-2016 has rebranded its core offering as Discovery Hub, having re-architected it to better enable self-service analytics using the likes of Qlik and Tableau. The company has also moved to a 100% indirect sales model and is looking to expand its addressable market beyond Microsoft SQL Server to address cloud- and/or Hadoop-based data lake environments.

The 451 Take

TimeXtender has made some significant changes in the last year that put it in a better position to meet its ambitious growth goals. In 2016, we stated that we saw wisdom in the company's focus on Qlik resellers to grow its profile and customer count. While this strategy is still in its early phases, the delivery of Discovery Hub, which alters the positioning of the company from data warehouse automation to a platform for enabling self-service analytics, is also a shrewd move. It provides database administrators with an environment to create and define data models and govern data in a way that supports, rather than restricts, self-service access by data analysts.

Just over a year ago, TimeXtender told us it intended to grow its revenue from roughly \$10m to \$100m by 2020 – a lofty ambition, given that the company's chosen market, DWA, has been a niche segment to date. It's even more so, given that TimeXtender has focused on a subsegment of the overall DWA addressable market, having limited its support to Microsoft's SQL Server database.

The company's first step in that direction, in mid-2016, was to extend beyond the DWA segment, re-architecting its former TX DWA software, adding a semantic modeling layer and positioning it as TimeXtender Discovery Hub. The result is an agile environment for designing and automating the deployment of not just the data warehouse, but also the associated self-service analytics layer using the likes of Qlik and Tableau.

DWA remains important to the company – TimeXtender describes Discovery Hub as being powered by TX DWA – but the Discovery Hub branding and positioning sees the company focusing more on the higher-level business benefits of DWA, including automation, governance and agility. Re-architecting the software will also enable the company to expand its addressable market beyond Microsoft SQL Server.

In addition to rebooting its core product, TimeXtender has also changed its sales model, switching from a combination of direct and indirect sales to a 100% sales model, particularly targeting the Qlik and Tableau partner ecosystems, as a means of accelerating scale. The result is that customers will be consuming a self-service analytics environment from a Qlik or Tableau supplier, which will be taking advantage of TimeXtender's underlying functionality.

While it is early stages, the company is seeing signs that the move is paying off – it notes that it is building its channel 50% faster than its internal model suggests it would need to in order to reach its \$100m revenue goal by 2020.

In terms of customer count, the company has grown to 2,700 from 2,600 a year ago. Existing TX DWA customers already have access to the additional Discovery Hub functionality and are adopting it when it fits their schedule. For example, TimeXtender sees some customers taking advantage of its ability to generate models for Qlik while continuing to rely on a traditional star schema data warehouse. As and when customers do transition to the broader functionality, so will they also transition from direct to indirect sales and support.

The company's headcount is also up from about 50 a year ago to more than 80 today. While the shift to

indirect sales will likely affect its employee base, TimeXtender doesn't believe it will lose any employees. It intends to reposition sales and support staff to serve and work with partners, rather than direct customers.

Products

To create Discovery Hub, TimeXtender essentially dismantled TX DWA and rebuilt it with the addition of a semantic layer. The architecture now consists of three primary layers, which are, from the bottom up:

- The Operational Data Exchange layer, which provides for direct access into underlying data sources. This is, in effect, the company's existing integration functionality, which enables access to data from multiple sources, including Oracle Database, IBM DB2 and IBM Informix, as well as text files and any sources compliant with ODBC, OLE DB and ADO.
- The Modern Data Warehouse layer, which is built out by and for each customer based on their application requirements and business terms and provides a flexible environment to design and automate the creation of a data warehouse. This is, in effect, the company's core DWA functionality – automating the generation of ETL code, the building and development of the warehouse, the generation of documentation, and the building of any required OLAP cubes. However, TimeXtender has moved beyond its traditional focus on a strict adherence to a predefined dimensional model and star schemas (as epitomized by data-warehousing pioneer Ralph Kimball) to a more flexible loosely normalized approach.
- The Semantic layer, which is new and enables users to build out and reuse models of data based on metadata. This layer also takes advantage of the company's ability to create models that generate the data files to be consumed by Qlik desktop, server and cloud environments, eliminating the need for Qlik users to write their own Qlik scripts.

Above that sits the Front End layer, which is part of the conceptual architecture but is delivered by the customer's own choice of separate visualization software, such as Microsoft Power BI, Qlik, Tableau or Microsoft Excel. TimeXtender maintains that it enables support for any visualization or reporting tool that is capable of integrating with SQL Server, although it is obviously closely associated with Qlik.

Strategy

TimeXtender notes that the reason it was able to take this approach of dismantling TX DWA and rebuilding

it as Discovery Hub was due to its focus on Microsoft SQL Server, which meant that it didn't have to optimize the results to work with multiple analytic databases.

Having done so, however, the company is now in a better position to expand its focus to multiple environments, including Hadoop and cloud data stores. The company is planning to do just that later this year, taking advantage of the ability to build a semantic data model that can automate the creation of data warehouses to be applied to multiple environments.

TimeXtender can be expected to start with the Microsoft ecosystem, however. As previously noted, it has plans to expand its focus to the cloud with support for Microsoft Azure SQL Data Warehouse, while it can also be expected to take advantage of services like Azure Data Factory to address the creation of governed self-service analytics on the Azure Data Lake.

The company is also building machine learning functionality into the Operational Data Exchange layer with a view to enabling Discovery Hub to self-learn the optimal approach to sequencing, load and processing data.

Competition

There are four primary vendors offering what could be described as DWA software, with TimeXtender most likely compared with WhereScape, Attunity with Compose (which it acquired in late 2014 with the assets of BIReady) and Magnitude Software (which was formed in 2013 by the combination of Kalido and Noetix by SilverBack Enterprise Group).

TimeXtender maintains that its biggest competition comes not from those three other vendors, but from IT departments or data warehouse consultancies building data warehouse environments by hand. Using DWA tools is rare, and the four providers probably have more to gain by collectively evangelizing DWA over more traditional approaches than they do in competing head-on with each other.

Clearly with Discovery Hub, TimeXtender is moving away from competing directly with its traditional DWA rivals. We believe it may begin to be compared with other vendors that are providing governance and data management functionality to support self-service analytics, such as Alation, which has recently moved to highlight its role of providing 'governance for insight' and partnership relationships with Tableau and MicroStrategy.

The self-service analytics vendors have also indicated their willingness to deliver governance functionality to support more strategic deployments. For example, Qlik's DataMarket for 'corporate data' will be targeted at data experts who want to create, model and [manage metadata](#), while the integration of Tableau's acquired HyPer Data Engine will bolster scale and performance, and additional data management features for [data governance](#).

These initiatives could see Qlik and Tableau delivering functionality that overlaps to some extent with Discovery Hub, although TimeXtender clearly has a broader offering that makes it an attractive partner to cover the functionality that Qlik and Tableau do not offer themselves.

SWOT Analysis

Strengths

TimeXtender has clear expertise when it comes to data-warehousing automation, which it is putting to good use as the underpinning for Discovery Hub, as well as ambitious growth plans.

Weaknesses

The company doesn't have a large profile, in part due to the fact that data-warehouse automation has – to date – been a niche market, and it has focused only on Microsoft SQL Server environments.

Opportunities

Positioning as a complement to, and enabler of, strategic self-service analytics is likely to raise TimeXtender's profile, while partnering with resellers should also expand its addressable market.

Threats

The company's rivals can boast support for databases beyond SQL Server, while the concept of governance as an enabler of self-service analytics and its competition is likely to grow.

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M&A ACTIVITY BY SECTOR
M&A ACTIVITY BY ACQUIRER
FIGURES SHOWN INDICATE NUMBER OF TRANSACTIONS

COMPANY MENTIONS (PRIMARY)

[TimeXtender](#)

COMPANY MENTIONS (OTHER)

[Alation](#) [Attunity](#) [BIReady](#) [Compose](#) [DataMarket](#) [HyPer](#) [IBM](#) [Informix](#) [Kalido](#) [Magnitude Software](#) [Microsoft](#) [MicroStrategy](#)

[Noetix](#) [Oracle](#) [Qlik](#) [Silverback Enterprise Group](#) [Tableau](#) [WhereScape](#)

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