Coverage Initiation:
Aera Technology illuminates its “decision intelligence” strategy

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by Krishna Roy

The company has entered the decision intelligence fray in earnest. Decision intelligence — an emerging sector focused on enabling “intelligent” data-driven decision-making via the extensive use of machine learning — is all about making data-driven decision-making more pervasive by leaning into ML to make it easier, quicker and more efficient.
Introduction

While a prevalent corporate activity, making strategic and tactical decisions using data is by no means ubiquitous. According to 451 Research’s Voice of the Enterprise: Data & Analytics, Data-Driven Practices 2022 survey, 25.3% of respondents said some strategic decisions were data driven at their organization, while 7.5% said few strategic decisions were data driven. Decision intelligence is all about making data-driven decision-making more pervasive, in large part by leaning into machine learning (ML) to make it easier, quicker and more efficient.

Aera Technology entered this emerging field of analytics in earnest with the debut of Decision Cloud earlier this year. Its offering is designed to be a comprehensive SaaS platform for “decision intelligence.” The vendor has also started to market itself as a decision-intelligence specialist, having previously positioned its ability to digitize, augment and automate decisions as a “cognitive automation” play.

THE TAKE

Aera Technology is the largest and most globally widespread decision-intelligence specialist. This places the company in a solid position to court one of its target markets: large enterprises that frequently operate in multiple geographies. The firm’s Decision Cloud covers all of the bases when it comes to a decision-intelligence platform, which requires ML-driven data management and analysis to be effective. As with any new approach, market education and sales evangelism are required to communicate its benefits. Aera notes that it doesn’t necessarily start a customer engagement with decision automation, but instead delivers a guided roadmap to it as the customer’s comfort level with it increases. However, some individuals might still worry that decision automation will make them redundant, rather than more productive, the latter of which is the intended purpose.

Context

The vendor was launched in June 2017 by president and CEO Fred Laluyaux, as well as founder and chief technology officer Shariq Mansoor. However, the genesis of a core piece of the Aera Decision Cloud existed in 2005 when Mansoor developed it and founded his former company, FusionOps. Mansoor created patented technology to automatically crawl transactional applications such as ERP apps without causing a major performance drain, which typically occurs when doing so. Aera draws on this technology to provide data crawlers within its decision-intelligence platform called Decision Cloud.

It raised funding at launch when New Enterprise Associates led the company’s $50 million funding round and Fred Laluyaux, an industry veteran, joined to head it up. Laluyaux has held senior management roles at Business Objects and SAP SE, and previously spent five years as CEO of Anaplan. Aera last landed venture capital in June 2019 when it secured $80 million in a round led by DFJ Growth, with participation from several other investors, including NewView Capital, Georgian Partners and Laluyaux himself. Laluyaux notes that he continues to aggressively scale the business on the back of financing raised. The vendor is funded to the tune of $173 million.

Aera cites a current headcount of 425 employees who are spread across multiple geographies. The firm has headquarters in Mountain View, Calif., and an office in San Francisco. It also has operations in Bucharest and Cluj-Napoca in Romania; Paris; Munich; London; Pune, India; Sydney; and Singapore.
Strategy

The company is priming Aera Decision Cloud as a self-service, modular, SaaS platform for decision intelligence. It is targeting it at very large enterprises with complex IT environments as well as organizations that are best-in-class within their domain, in the belief they will get the most value from decision intelligence.

Aera Decision Cloud is designed to provide business stakeholders with a user-friendly experience, while developers are provided with an integrated development environment called Aera Developer. Developer, which was unveiled in 2021, aims to enable developers to create, manage and deploy decision-intelligence applications. The vendor has essentially “SaaSified” it and made it available within Decision Cloud. It doesn’t disclose the number of paying customers it has amassed. However, Aera does note that quite a few are the largest enterprises and brands in the world, which employ it for uses cases such as supply chain analysis and procurement, media planning, and revenue management.

Additionally, Decision Cloud comes with composable applications called Skills that are designed to extend its capabilities by catering to use cases that could be enhanced by decision intelligence. They are organized into domain-specific Skillsets. For example, the firm’s Procurement Skillset is intended to make direct procurement more efficient and strategic by recommending the most appropriate supplier based on performance, cost, timeliness and other key business metrics. It also proactively and automatically checks and ensures contract compliance, predicts supplier delivery delays, and recommends the best course of action when supply exceptions occur. Applications for demand-focused analysis, inventory planning, order fulfillment for customers, logistics, and corporate financial performance are other Skills offered.

Decision Cloud’s capabilities for data scientists and other individuals with extensive data and analysis expertise include the ability to import models built in third-party modeling environments, such as Jupyter Notebooks, as well as create ML learning models directly within its platform. An Excel-like user interface for model building is also provided as part of a user-friendly model-building focus.

The offering is designed to run in automated, human-assisted and manual modes depending on the use case and user. Moreover, this, alongside an ability to operate in real time, enables all relevant data to be present in the same platform — underpinning insights (by understanding and exposing the logic as well as calculations involved) is at the heart of Aera’s goal to digitize decisions to deliver effective decision intelligence.

Aera Decision Cloud

The vendor’s decision-intelligence platform takes actions autonomously owing to a Cognitive Operating System, which powers it by featuring development, management and deployment functionality. As part of this purview, it provides the ability to set automation rules. The automation rules enable decision automation by providing configurable logic atop recommendations. The user can also accept, reject or modify system-generated suggestions and insights, which are captured and learned from to refine subsequent recommendations and analysis.

Personalized, ranked recommendations are presented to the end user at login within an in-box called Cognitive Workbench. Cognitive Workbench also keeps a record of all decisions taken, which the user can click through to view, as well as drill into for further detail. Recommendations are designed to be easy to understand, contextualize and act upon owing to natural language generation tools, which express them in plain English.

Additionally, Decision Cloud houses a data science engine called Cortex for developing and deploying data science workflows and making ML models available to be embedded into recommendations and other insights. The company’s data science engine features direct integration with live, harmonized data sets, contains domain-specific ML algorithms, and optimizes automated machine learning. A data scientist can also import third-party models into it. Drag-and-drop what-if analysis and planning, as well as reports and dashboards, are also provided as part of its analysis layer. Write-back to offer individuals a system memory of decisions, as well as a confidence score to communicate the level of confidence the system has in a recommendation, are other capabilities provided to enable data-driven decision-making.
Aera’s data crawlers are another linchpin. The vendor’s data crawlers automatically discover and extract data from transactional applications in the cloud. Aera notes that its data crawlers are optimized for frequent deployment to extract hundreds of millions of rows of transaction data on a continuous basis. It is not uncommon for them to crawl 50 different apps to get the information required, according to management. Integration agents for on-premises data are included as well.

Additionally, Decision Cloud includes a Data Workbench that is deployed to transform and process the data into one decision model, which is made available in a Digital Twin to offer access to the extracted data in real time. Drag-and-drop data blending is also available for user-friendly data management, which is also delivered via system-suggested transformations and other data-wrangling recommendations. The user can accept or reject them, enabling the system to learn from these user inputs. Finally, Aera’s offering incorporates graph database and explorer technology in line with its belief that decision intelligence requires a platform that tightly integrates these technologies to augment and automate decisions.

**Competition**

The decision-intelligence sector is currently populated by specialists — even though we anticipate enterprise big guns to move in over the next 12 months. In our opinion, Aera Technology’s approach is closest to that of decision intelligence specialist Peak AI’s because of a shared focus on applications to make decision intelligence easier for business decision-makers, as examined here. However, all decision-intelligence platforms are not the same. There are technical capabilities in Aera Decision Cloud that differentiate it from Peak and other decision intelligence vendor’s approaches. The firm’s data crawlers are a source of differentiation — as is its desire to fully automate decision-making, which isn’t shared by all decision intelligence providers.

Pyramid Analytics, Paretos, Sisu Data, Tellius, Diwo and Quantexa are other decision-intelligence specialists. Organizations evaluating this emerging approach to data-driven decision-making are therefore likely to evaluate them as well.

Finally, we wonder whether Aera’s focus on the delivery and execution of recommendations for actions that optimize financial performance (it also concentrates on business and operational performance) will bring it into rivalry with vendors in the corporate performance management space. Planners and other individuals in financial planning and analysis roles within an enterprise could deploy Aera Decision Cloud — and these user personas are a primary focus for CPM platforms from players like Oracle Corp., SAP, OneStream Software, Anaplan and Board International.
### SWOT Analysis

#### STRENGTHS
Aera Technology is run by a management team with a stellar pedigree. Decision Cloud has some differentiated capabilities, including the ability to crawl source systems with minimal impact on their performance, which is a hard nut to crack.

#### WEAKNESSES
Cloud-averse organizations will not consider Decision Cloud, and neither will those that are content with their current form of data-driven decision-making platform involving dashboard and reports.

#### OPPORTUNITIES
It could be time for Aera to raise some more funding. It has been over three years since the firm's last tranche — and an additional infusion of venture capital would help accelerate product and business development initiatives.

#### THREATS
The company is not alone in addressing decision intelligence. It is a sector occupied by an increasing number of fellow specialists, compared with two years ago when there were only a couple of pure plays in the market. CPM providers present another potential layer of competition owing to their shared focus on planners and finance types.