

Denodo's logical data fabric solution enabled RMIT University to respond to data challenges with agility and ensure student safety during COVID-19, through its unified and secure data access layer, saving significant time and resources.

A Logical Solution to the Data Challenges of a Top Australian University

May 2022

Written by: Emily Lynch, Senior Market Analyst

Introduction

Organisations are accelerating the modernisation of their data platforms in order to navigate the tectonic shifts wrought by COVID-19 on the way their business operates. This, coupled with ever increasing volumes and variety of data, drives organisations to invest in strong data management solutions, and innovative and creative ways to accelerate the delivery of data. Solutions that deliver superior business insights across the complexity of an organisation are more vital than ever before.

In the tertiary education space, there is an industry mandate to use this data for better student experience and support, as education becomes increasingly personalised and is seamlessly delivered through in-person and online channels. This data is also vital for student safety and care — particularly during the COVID-19 crisis.

RMIT, a university based in Victoria, Australia, with more than 130 years of education leadership, is one of the state's top universities. It has over 96,000 students globally and campuses in Melbourne and Vietnam, and a research and industry collaboration centre in Spain.

RMIT's IT operations are complex. The multisector education provider has a growing repository of data sources and applications across on-premises and cloud environments. Multiple departments need to access these data sources, with many gaining access through different channels and disparate tools. This created data access challenges, leading to data silos and difficulties in data integration. There was a need for a standard, consistent, and unified view of data across the entire organisation.

In addition to data integration challenges, the outbreak of COVID-19 in early 2020 across Australia saw additional requirements for education providers around student contact tracing and movement data. In the event of a positive case on campus, RMIT needed to be able to provide real-time information very quickly to the Victorian Department of Health from a complex range of data sources.

In order to overcome these challenges, RMIT selected Denodo as a data integration platform specialist.

SOLUTION SNAPSHOT

ORGANISATION:

RMIT University

ORGANISATIONAL CHALLENGE:

Multiple (70+) data sources requiring a standard, unified view

Increased and complex reporting requirements for COVID-19 contact tracing

SOLUTION:

Denodo logical data platform

BENEFITS:

75% increase in data visibility to non-IT users through a 'single pane of glass', consistent view of cloud-based and on-premises data sources

35% time savings in producing reports with integrated views of multiple data sources, **from an average time of two weeks to 3-4 days**

70% increase in volume of queries produced through the Denodo platform in the past six months alone

Ability to respond **swiftly** to changing Department of Health requirements for contact tracing and student movement

70% time savings in data access management, resulting in the **freeing up of resources in IT** with self-service capability for users in other business

Implementation

Before deploying Denodo's data integration tool, IT staff at RMIT had to navigate the University's 70+ data source systems directly, and manually create data visualisations and inputs for reports and insights for different lines of business in the organisation. This was time-consuming for IT resources and created a standardisation risk with data sources being accessed directly.

The University's IT department also had focus areas around campus modernisation, and excellence in online course delivery in response to the acceleration of remote learning due to COVID-19. Denodo was an important tool to support students, researchers, and faculty members in performing their functions and undertaking studies remotely, underpinned by strong access to data through their channel or tool of choice. The University is also deploying an increasing number of applications in cloud environments.

RMIT began full use of Denodo in 2019, gradually integrating more and more data sources in Denodo's logical data platform. The University's IT team evaluated several data integration vendors in late 2018. Their criteria for selecting the right vendor included the ability to provide a single virtualized layer of data for its multiple data sources across on-premises and cloud environments, as well as self-service capabilities for a wide user base. Denodo emerged as the superior solution due to its light-weight, hybrid architecture, time to delivery, and its seamless ability to connect to an enormous multiplicity of different data sources and systems.

As part of the implementation, RMIT partnered with a project team from Denodo to manage the project end-to-end. Denodo's customer relationship model has a 'Customer Success Manager' role integrated into the relationship to ensure close customer engagement. Denodo also provides advisory services around best practices and guidelines to implement cloud migrations of data sources, and advice on customer use cases. Denodo has also created role-based training guides to further smoothen the implementation of its logical data fabric across architect, developer, and admin roles.

RMIT conducted its initial integration of Denodo's data virtualization layer over several months, building up the environment by integrating more data sources, and rolling out access to a wider user base. A period of around six months saw the university elevate its use of Denodo from proof of concept to first production release.

Benefits

Denodo has delivered key benefits for the students, staff, and stakeholders of RMIT University:

75% increase in data visibility through unified, secure data access layer across multiple sources

The chief benefit that Denodo provides for RMIT is its unified data layer, with a 'single pane of glass' view of the university's huge and complex range of data sources, across cloud and on-premises applications. This single virtualized data layer enables much greater data access across these different sources, not just for IT functions but other parts of the business. This access is also more secure, as RMIT has one place to manage user access and implement security to its data sources more easily. This led to a 75% increase in data visibility for non-IT users, who, prior to Denodo's implementation, were unable to access the University's data warehouse.

35% faster time to serve and to deliver on a 70% higher report volume

RMIT's IT team estimates that the implementation of Denodo's logical data integration layer has resulted in 35% time savings for teams needing to create reports using integrated views of multiple data sources for IT and line of business, and in adding data sources. Now the team has the tools and the capability to deliver insights faster through Denodo,

servicing more business requirements through these efficiencies. The delivery of reporting and insights with integrated data views is now measured in an average of 3–4 days. In just six months between June and December 2021, the volume of queries RMIT executes on the Denodo platform has grown from 70,000 per month to 120,000 — an increase of 71%. RMIT has also saved developer time and resources, due to the scalability of Denodo's logical data fabric once a data source has already been connected.

Enabled COVID-19 response and agility with key contact tracing data reports created quickly

Because Denodo is a highly scalable and user-friendly tool, RMIT was able to rapidly expand its use of the solution to support the University's response to COVID-19 in 2020. One key use case during the pandemic which saw RMIT leverage Denodo's unified data integration more deeply was contact tracing. At the time, in the event of a positive COVID-19 case there was a strong need for real-time reporting and data around staff and student movement and locations on campus. The Victorian Department of Health's response to COVID-19 required stringent reporting for safety and contact tracing. These requirements developed rapidly and RMIT had to be agile to respond to these.

Denodo's data integration played a vital role in COVID-19 reporting and contact tracing for the University. RMIT scaled up its use of the solution to integrate data from 10–20 new data sources. In the event of a positive case on campus, this enabled the University to deliver the required reporting for the Victorian Department of Health and meet the department's rapid timelines for information. This capability was implemented in the span of just four to eight weeks, and gave RMIT the agility to respond to rapidly changing reporting requirements and greater confidence in its ability to ensure student safety on campus.

During COVID-19, the need for real-time and rapid insights through new data was greater than ever. Denodo gave RMIT the ability to build contact tracing and staff and student movement reports in a matter of days — to ensure the data was relevant and would meet the reporting requirements of the Department of Health. Denodo was key to the University's ability to deliver within the required timelines of the Department of Health, delivering true value in data integration at a crucial time.

70% time savings in data access management through self-service capability for business units

As RMIT has expanded the user base for Denodo from IT functions across to business and professional staff, this has enabled business units to self-serve through Denodo's centralised reporting and analytics. Business users can pull and integrate their own data, and have direct access to analytics and delivery tools. This created measurable operational efficiencies for IT resources. Instead of IT teams pulling visualisations and data reports for business and professional staff, the data is available through Denodo's single logical layer. Lines of business have the opportunity to create their own reports, and do their own data modelling. This has resulted in time savings of 70% for IT teams in management and setting up of user data access.

Not only does this free up resources in IT functions, but by making data available to business, RMIT has centralised its data access with appropriate access controls in place. Data can now be accessed by a variety of different

Denodo's logical data platform gave RMIT a holistic, integrated view of staff and student movement on campus with real-time information, enabling the university to respond to COVID-19 with agility and to meet Department of Health's changing contact tracing and reporting requirements.

stakeholders, regardless of whether they sit in an IT or business team. This unlocks data from silos, and is a key enabler for distributed, agile teams.

Supports RMIT's accelerating transition to the cloud

The implementation of the Denodo platform also supports RMIT's strategic goals in terms of its acceleration to the cloud. Denodo's unified data layer solution runs on a hybrid architecture, which enables the university to better bridge the divide between its cloud and on-premises data sources. As more and more data sources are now moving towards cloud environments, Denodo enables the university to speed up and increase its connectivity to cloud-based data sources.

Looking forward, RMIT has renewed its contract with Denodo for a further three years, through to 2024. In the next year, the education provider expects increased usage of Denodo through more reports, more data sources, and more technical modelling to underpin and inform the university's strategic direction.

Methodology

The project and company information contained in this document were obtained from multiple sources, including information supplied by Denodo, questions posed by IDC directly to RMIT University employees, and RMIT University corporate documents.

About the analyst



Emily Lynch, Senior Market Analyst

Emily is responsible for core research, tracking the Australia and New Zealand IT Services markets. Her services research includes market sizing and forecasting, competitive analyses, business modelling, and primary research with vendors, distributors, and retailers in Australia and New Zealand. Emily also delivers research projects and reports in a wide range of other ICT disciplines, including security, digital trust, and policy-focused analyses of regulatory environments and government strategy across Australia and New Zealand.

IDC Custom Solutions

The content in this paper was adapted from existing IDC research published on www.idc.com.

IDC Corporate USA

5 Speen Street
Framingham, MA
01701, USA
508.872.8200
Twitter @IDC
idc-community.com
www.idc.com

This publication was produced by IDC Custom Solutions. The opinion, analysis, and research results presented herein are drawn from more detailed research and analysis independently conducted and published by IDC, unless specific vendor sponsorship is noted. IDC Custom Solutions makes IDC content available in a wide range of formats for distribution by various companies. A license to distribute IDC content does not imply endorsement of or opinion about the licensee.

External Publication of IDC Information and Data — Any IDC information that is to be used in advertising, press releases, or promotional materials requires prior written approval from the appropriate IDC Vice President or Country Manager. A draft of the proposed document should accompany any such request. IDC reserves the right to deny approval of external usage for any reason.

Copyright 2022 IDC. Reproduction without written permission is completely forbidden.