



Case Study

University Leverages Data and Remote DBA Services for Better Student Engagement



OVERVIEW

Across industries, all modern organizations are fueled by data, and learning from that data is a natural pursuit to grow and optimize, especially in higher education. Harnessing data on attendance, dropout rates, and classroom participation helps institutions proactively engage with students to keep them on a path to graduation.

Challenge

For one university, leveraging their data required migrating two on-premise data centers to Microsoft Azure cloud services with ongoing optimization – a big demand on their internal IT team’s bandwidth and expertise.

To realize the potential benefits of their data, the organization needed extra data architecture and database support. The university recognized that a senior database architect and administrator would bring value to every aspect of the **data lifecycle**:

- 1 **ASSESSING** the environment
- 2 **ARCHITECTING** the future state
- 3 **IMPLEMENTING** the future state
- 4 **MANAGING** the environment
- 5 **LEVERAGING** the data for business insights

To fill the database expertise gap, the university found the ideal partner with Ntirety’s Remote Database Administrator (DBA) and OnDemand services.

INDUSTRY
Higher Education

SOLUTIONS
Remote Database Administrator (DBA)
OnDemand Database Services
Managed Azure Cloud

Solution

By supporting every aspect of the **data lifecycle**, Ntirety's database services were foundational in helping the university gather the insights needed to make an impactful outreach to students. In order to let their internal IT teams and data scientists focus on other their core functions, **Ntirety's Remote DBA and OnDemand services** stepped in as the university's IT research and development staff for **Data Factory, Databricks, machine learning**, and other **Azure services**. Acting as a liaison between Microsoft and the university with specific goals in mind, Ntirety provided guidance and training for internal developers as new products and tools became available.

Ntirety's highly flexible OnDemand solution supplied the Azure, database, and business intelligence expertise needed to tackle different projects week to week. These various projects included continuously optimizing queries to improve the performance of the database environment, make more efficient use of resources, and help reduce costs. In one such instance Ntirety tuned a critical query's runtime from minutes to seconds. Ntirety's Remote DBA support allowed the university to truly start leveraging their data by providing the ongoing implementations and 24x7 management aspects of the data lifecycle.

Once the future state was deployed and managed to ensure availability and performance, Ntirety helped spearhead the direction of the university's business intelligence and AI initiatives. By performing much of the technological roadmap design and the associated data engineering, Ntirety helped the university's data scientists focus on building algorithms and gleaning insightful data from the information they had.



RESULTS

Leveraging data to make more accurate and informed business decisions is the most beneficial point in the data lifecycle for almost every organization, and the university's data scientists were ready to start gathering more sophisticated insights.

By collecting and standardizing data from a variety of different systems, data scientists could evaluate a more complete picture of student success criteria including:

- ✓ Class attendance
- ✓ Participation levels
- ✓ Interaction rates with advisors
- ✓ and more

Through the IT architecture designed and constructed by Ntirety's database experts in conjunction with the university's internal tech team, the university was able to implement forecasting models to determine those students who were at-risk and proactively engage them earlier in their academic careers to help them stay in their programs and achieve their degrees at a higher success rate.

The university was able to effectively implement their own IT initiatives in part due to the foundational database services Ntirety consistently provided. From the smooth migration from on-premise to Microsoft Azure cloud and ongoing OnDemand support services, Ntirety helped enable continuous success for the university's data scientists and ultimately their students as well.



With over two decades of successfully operating, managing, and securing private, public, and hybrid cloud environments, Ntirety has led enterprises across industries through the volatile early days of data hosting into the world of 24x7 managed security with our premier Compliant Security solutions. Through cost effective and scalable solutions tailored to business-specific needs, Ntirety eliminates gaps in both security posture and compliance documentation by delivering solutions that cover the entire application, the entire compliance and security process, the entire time.

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