



Northern Alberta Institute of Technology (NAIT) Case Study

Introduction

In a world saturated by data, the most successful organizations take control of their data and use it to drive results.

The problem is data accumulates quickly from multiple sources. Higher education is particularly affected. Every new student, employee, program, and location generates more data to store and use. Application proliferation is also an issue, with the shift to online learning adding even more platforms to manage.

Each new system becomes another data silo, leading to duplication, inconsistency, and low data quality. This makes it hard for universities and colleges to trust their data, leaving this vital information untapped when it could be used to drive recruitment and retention at a time of [rising costs and falling enrollment](#).

How can institutions turn their data from a burden into an asset? The answer is Master Data Management (MDM). MDM is the process of consolidating data from multiple systems into a central repository. This golden record ensures data quality and gives institutions a single source of truth to make informed business decisions.

NAIT's team chose Semarchy xDM to solve their data challenges. We spoke with them about their journey and how MDM delivers real-world benefits.

Overview

As one of Canada's leading polytechnics, NAIT provides hands-on, technology-based education to more than 34,000 students from over 80 countries.

With four campuses, a huge staff, and a wide range of programs, the institution generates vast amounts of data about students, employees, alumni, and donors. NAIT's technical teams tried in-house solutions to manage this data, but their existing systems couldn't deliver the scalable MDM solution they wanted.

This led NAIT to look for a commercial MDM platform to consolidate data into a single hub and integrate it into other applications. NAIT published a request for proposal (RFP), which invited vendors to pitch their solutions. Through this, NAIT connected with [InfoMagnetics Technologies \(IMT\)](#), a North American Semarchy partner with over 20 years of MDM experience. IMT recommended Semarchy xDM as the best choice for solving NAIT's data challenges.

NAIT's Data Challenges

NAIT faced several problems when managing and integrating the identity data of people affiliated with the institution:



Siloed Data: Identity data for students, staff, alumni, and donors was stored and managed in multiple systems. Data was fragmented, duplicated, and out of date across these systems. This made it hard to know which dataset was accurate.



Inconsistent Definitions: NAIT didn't have a single definition for each type of affiliation to the institution. As such, a person could have a different identity depending on which data source was queried. For example, one system might have counted a student as enrolled if their course started in two weeks, while a different system treated that person as not yet enrolled. Different datasets returned different answers to the same question, which made reporting difficult.



Application Proliferation: The number of systems and applications NAIT uses has increased dramatically in recent years. Each new application creates yet another data silo.



Difficult Integrations: Each time a new application was introduced, NAIT's technical team had to make decisions about definitions, affiliations, and which dataset to integrate into the new application. This took up valuable time and led to inconsistencies between systems.

What Changed with Semarchy xDM?

NAIT's team took control of their identity data with Semarchy xDM. Semarchy's industry-leading match and merge capabilities let them identify duplicate data across disparate systems and consolidate it into a single source of truth.

This golden record gave NAIT a single view of identity data based on firm definitions. This led to improvements in data accuracy, operational efficiency, and student experiences:

Improved Data Quality

NAIT's team uses Semarchy to cleanse, standardize, and validate identity data. This improves data quality and consistency across applications, as each system draws from a single, trusted dataset.

Faster Integrations

NAIT's technical teams benefit from easier processes when integrating data into new applications. Previously, work was repeated as staff figured out affiliations and identities for each new application. With Semarchy, NAIT gets a single source of truth from which to integrate data into new systems. Real-time flow speeds up integrations even further, saving time and boosting efficiency.

Improved Student Experiences

A single view of identity and affiliation means students, staff, alumni, and donors are treated consistently across NAIT's digital platforms.

For example, MDM is the backend of NAIT's website and student portal. When users log in, they're connected to a single, correct profile based on accurate identity data. Any information users update on the web portal flows back to the central data hub, ensuring other systems stay in sync. These streamlined experiences give users a better impression of the institution and reduce the number of support requests made to NAIT's IT team.

"Semarchy xDM is the hub through which our data flows as it moves to and from our other applications. It ensures data consistency across all our systems, which is exactly what we set out to achieve. We've been impressed with xDM's flexible, configurable data model and the ease of use for administrators and end users. Semarchy exceeded our expectations of what an MDM platform could be, and it will be the foundation of our data and IT architecture going forward."

Loren Bain, *Director, Applications and Integration, NAIT*