

# BETTER DATA ACCESS EQUALS BETTER STUDENT EXPERIENCE

Our Customer

Challenge: Large-scale migration

Action: Managing from start to finish

Result: Competitive advantage



# The Customer

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A research-intensive post-secondary institution (PSI), made of of six smaller colleges, boasts some of the best educational experiences in the world.



# The PSI's Challenge: Large-scale cloud migration

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PSI recently celebrated 30 years of equipping students with the skills and knowledge they need to change the world. With six schools – chemical and biomedical; civil and environmental; computer science and engineering; electrical and electronic; materials science; and mechanical and aerospace – it has established itself as one of the leading post-secondary technology institutions in the world.

For PSI, success lies with “specificity”: the six dedicated schools that help students find and explore their passions. But this same specificity creates challenges with student management systems (SMS) continuity. Disparate SMS created unneeded complexity and costs around data handling, reporting, and management, making it harder for staff to manage student data at scale.

The university decided to streamline the student experience with a single, cloud-based offering – while ensuring the continued specificity that sets PSI apart from other post-secondary options. However, with no expertise in data migration or testing, PSI needed a partner capable of managing this SMS shift from end to end.

# The Action:

## Handling the transition from start to finish

While PSI had a clear end goal in mind, the complexity of combining six disparate SMS into a single cloud-based solution was beyond their scope of expertise. Even individual cloud moves can present obstacles when it comes to balancing the functionality of legacy solutions against new operational frameworks. Taking on this task six times over – and ensuring the finished product offered a seamless student experience – significantly ramped up the challenge.

Although PSI's IT teams had functional experience with existing SMS frameworks, they lacked the data migration, automation, and testing knowledge necessary to undertake a cloud-based shift at scale. And while leading cloud-based student information systems (SIS) offered an ideal upgrade to existing systems, PSI needed a partner capable of handling the transition from start to finish.

Cloud-based SMS systems help schools deliver student success at scale. The move to more agile offerings isn't just about reducing costs – it's about staying competitive in a global marketplace that leverages digital frameworks to enhance the student experience.

Prolifics' pedigree as a testing and automation partner for one of the world's leading SIS providers put us in the perfect position to assist. The university invited our teams to provide a complete managed service that covered all functional and non-functional testing – along with performance, security, and integration.

After an initial consultation to determine the scope of work, Prolifics deployed a team of 20 to handle the large-scale requirements of this cloud SMS move. Functions included everything from initial outset assessment to complete network scoping to creating a test strategy, with a planned completion date in October 2022.

For PSI, the ideal solution for their cloud migration was a hands-off approach. To accomplish this goal, Prolifics leveraged a three-way process:

- Provide and configure necessary software
- Make sure it was fit for purpose
- Provide the chance to accept the system as presented or suggest changes via a user acceptance testing (UAT) phase

Prolifics was also responsible for finding potential defects, making fixes, and then implementing another UAT.

In practice, this end-to-end management approach often meant combining functional testing with two-week sprints across multiple Prolifics scrum teams. In some cases, up to 12 sprints happened in parallel to ensure function models worked together and new system frameworks were capable of handling access requests from thousands of students simultaneously.

Security was also a top priority for this project – Prolifics’ strength of process and reputation as test experts both added value to the end product and de-risked the overall project to ensure student, staff, and administrative data was effectively defended in the cloud.

Prolifics teams designed robust testing strategies to maintain consistency of form and function across new cloud-based SMS deployments. This included high-level test management, manual testing engagements, overall performance testing, and targeted security testing. Overall, Prolifics made it possible for the university to quickly evaluate and assess components and ensure they were up to standard before substantive data migration took place.



# The Result:

## A foundation for student success far into the future

To deliver results more effectively and efficiently, Prolifics developed university-sector-specific testing solutions such as the performance test cloud.

Utilizing J-meter in AWS, Prolifics teams created accelerators around performance testing that made it possible to see live metrics anywhere in the world, allowing everyone involved in the project to visualize critical metrics and measurements in real time. By combining cleansed and validated data with automated processes, Prolifics teams were able to generate graphs and dashboards that quickly communicated project status and next steps to school stakeholders, in turn providing confidence to university management that work was proceeding as planned and migration was well underway.

The ability to track migration progress across, backed by the in-depth expertise of Prolifics experts, provided confidence in the project. Additionally, ongoing user acceptance testing (UAT) and continual performance, security, and validity testing helped ensure SMS deployments were on the right track.

Cloud-based SMS systems help schools deliver student success at scale. The move to more agile offerings isn't just about reducing costs – it's about staying competitive in a global marketplace that leverages digital frameworks to enhance the student experience from application to enrollment, to records management and career opportunities.

For PSI, making the move to cloud SMS was critical to help lay the foundation for the next 30 years. For Prolifics, the project was an opportunity to showcase end-to-end management that included data mapping, cleansing, testing, and validation.

Along with increased efficiency and streamlined processes, the university has recognized competitive benefits that help drive sustained student success.

To learn more about what we can do for your organization, [connect with a Prolifics expert today.](#)



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We provide consulting, engineering and managed services for all our practice areas – Data & AI, Integration & Applications, Business Automation, DevXOps, Test Automation, and Cybersecurity – at any point our clients need them.

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