

Data#3



FUN FACT

By 2020, at least 10% of higher education institutions will use smart machines to improve student success.

Gartner (2019). Use AI to Take Student Success to the Next Level of Personalization in Higher Education. [Online] https://www.gartner.com/en/doc/348655-use-ai-to-take-student -success-to-the-next-level-of-personalization-in-higher-education



ABOUT MCM

For many at-risk young people, engaging with traditional schooling is problematic. For those struggling with social factors, including homelessness and young parenthood, The Hester Hornbrook Academy, an Independent school run by Melbourne City Mission, offers the flexibility and inclusiveness that makes education possible.



OBJECTIVE

To deploy a technology update that better integrates the business and provides tools to give students the best future prospects.



COMMENTS

"Many students haven't had a great experience with education, and we want to redefine success for them. We have made a modern Microsoft environment that will prepare our young people for 21st Century workplaces."

Tim Knowles, Principal at The Hester Hornbrook Academy, Melbourne City.



APPROACH

Using consultants from Business Aspect, a Data#3 company, a three-year technology roadmap was devised to deliver the technology capabilities that would enable the Hester Hornbrook Academy's (an Independent school run by Melbourne City Mission) five-year strategic plan. A key element was the inclusion of Data#3 services to consolidate the technology into a single, collaborative user environment.



BENEFITS

- Office 365 Education tenant sharing a single Active Directory forest with another Office 365 tenant
- **Customised Azure Active**
- **Directory Connect deployment**
- Devices joined to Azure Active Directory via Autopilot with mobile device management via Intune
- Hurdles impacting student engagement overcome through simplified processes
- Students have access to modern tools that will help them transition into the workforce
- Staff and teachers can work more productively in the updated

TECHNOLOGY

- Office 365 Education Tenant Sharing
- Microsoft Azure Active Directory Connect
- Mobile Device Management via Intune



The Background

For many at-risk young people, engaging with traditional schooling is problematic. For those struggling with social factors, including homelessness and young parenthood, The Hester Hornbrook Academy, an Independent school run by Melbourne City Mission, offers the flexibility and inclusiveness that makes education possible.

The entire organisation, from teachers and management to the IT team, is focused on removing obstacles to education. A dated and inefficient IT environment meant that collaboration was limited. For students to do their best work, modernisation was needed.

The Challenge

Outdated technology was restricting development activities and affecting classroom productivity. Accessing the right systems could be time-consuming for teachers, and there was little opportunity for collaboration. Many students didn't have access to suitable devices or internet access at home, restricting homework activities. Taking their cue from teaching staff, the IT team knew they needed a solution to give students the best outcome.

However, there was only a brief window of opportunity; the first phase of the project had to be completed within six months, ready for the new school year.

"Delays would mean disruption for the students, which could affect their engagement," said Melbourne City Mission's ICT Service Delivery Manager, Damith Ratnayake.

"The school didn't have its own technology platform, and Melbourne City Mission used traditional enterprise configurations. If we just replicated what was used by staff, it would have meant an expensive overhead that didn't deliver the outcomes the school needed, but the solution was architected to give us a single, consolidated service to manage," said Ratnayake.

Any technology choice could have a significant impact on students' future employment prospects in an increasingly digitised world.

"More than 70% of workplaces use a Windows operating environment, and we had to consider students' employment prospects when determining what technology we would use," said Ratnayake.

"To engage them we have to be really relevant in today's technology."

With an expected growth from 200 students currently to an anticipated 1,000 in five years, scalability was essential. Availability of in-house resources was also a stretch, so any solution must be easily managed.

"We are not a technology shop; we don't have the time or resources to keep ahead of technology. We needed a partner that capable of delivering."

IT Outcome

To address Melbourne City Mission's unique circumstances, Data#3 implemented a unique solution that integrated two separate Microsoft Exchange tenancies into a single user environment. By enabling the Office 365 Education tenant of the Hester Hornbrook Academy to share a single Active Directory forest with the Mission, the way was paved for greater collaboration.

Using a customised Azure Active Directory Connect deployment, subsets of users were synchronised as either 'user' or 'contact' in each tenant. This measure meant that both the Mission and the Academy were afforded a global address list (GAL). Students were then synchronised using Microsoft School Data Sync (SDS) via Microsoft Flow, an Office 365 automation tool, using a CSV file exported from the original class lists maintained in Excel.

A key element of the project was employing Windows Autopilot to join machines to Azure Active Directory, using their hardware ID. In conjunction with Microsoft Intune, which provides cloud-based device management, the Mission can remotely apply custom operating system images to the devices, so that students can simply log in and get to work.

"We wanted to use the latest technology, but not many people in the market have deployed Intune and Autopilot in this way before. Data*3 had both the capability and skillset," said Ratnayake.

Automation of Office 365 tasks is performed using Azure Automation, making for minimal intervention. The strain placed on by the older, manual system has been removed. The technology team is free to focus on the next phase of technology overhaul, and explore the benefits of the Platform as a Service (PaaS) now in place.

"We are excited because the foundation has been set to run more core systems and technologies that are needed in modern classrooms," said Ratnayake.

Business Outcome

For students, the new school year has commenced with technology now acting as a positive influence. Access to the latest technology has been well-received and adds to the sense of positivity the school strives for throughout its efforts. Echoing the school's focus, the new environment presents youngsters and their teachers with the fewest technical hurdles possible.

"We don't want students to worry about setting up their email and so on. They put in their credentials, Microsoft Intune and Autopilot does the rest," said Ratnayake.

Tim Knowles, Principal at The Hester Hornbrook Academy, Melbourne City Mission, is already seeing a difference in classrooms.

"The kids will now hold video conferences using Microsoft Team, collaborate using OneNote, create slides in PowerPoint, all the best tools for business; we are taking away that level of disadvantage, and giving our students what others in any world-class school would have," said Knowles.

"They come in the door, they're handed a ThinkPad that is ready-charged, loaded with a fantastic suite of apps, and all of their learning is done online."

The reach of the new environment extends far beyond the Academy's doors.

"Young people can now access their learning from any location, any connected device, even if they just have a smartphone with public Wi-Fi, they can login like they were in the classroom." said Knowles.

The outcome has been designed to operate with limited overheads and without the need for specialist in-house skills. While Ratnayake said any project will hit a few bumps, his past experience of partnering with Data#3 filled him with confidence. Data#3's technical strength and proven reliability made them the partner of choice. This paid off when engineers identified and quickly closed a potential security issue, thanks to ready access to SharePoint experts.

"There were no significant challenges because of the level of skill of the Data#3 engineers. In fact, the steering committee was surprised at the limited number of issues we faced in so significant a project," said Ratnayake.

Conclusion

Looking back, the Mission's team credits much of its success to the early involvement of the Data#3's highly skilled consultants. This allowed them clarity of purpose from the beginning, something vital when working to a tight deadline.

"The strategy investment from Business Aspect at the start paid for itself; we architected new capabilities aligned to the school's growth strategy, and we chose the right partner for the technology piece," said Ratnayake.

"We've done what we said we were going to do, utilising the latest technology available." It is the human aspect of the project that has given the team at Melbourne City Mission the greatest satisfaction, though, and the knowledge that careful investment has allowed them to help more students to reach their potential.

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