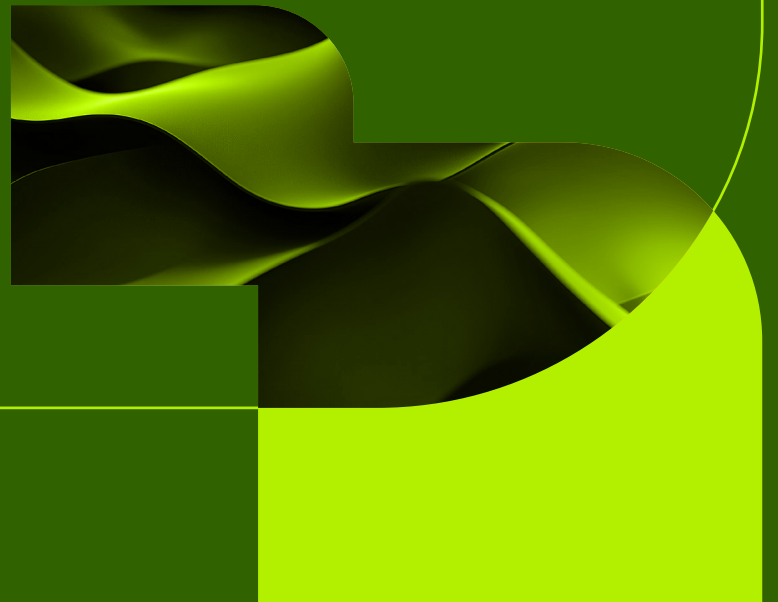




Case Study

MATHS PATHWAY DELIVERS PERSONALIZED LEARNING

*With the help of Apache
Cassandra[®] and Instaclustr*



Industry

- Education technology

Products used

- Open source Apache Cassandra® on Azure

The Maths Pathway solution helps educators structure the right maths course for their students by determining a student's individual learning abilities and automatically assigning personalized work tasks.



Challenges

- Maths Pathway sought scalable infrastructure to support their ambitious growth
- They needed a managed service for backend infrastructure and database management



Results

- Enabled tailoring of individual maths learning programs for individual students
- Achieved an amazing 180% growth since inception

No student left behind

Maths Pathway is a company founded by a couple of classroom teachers who were sick of seeing some of their students left behind. They knew that there was a way of applying technology to the problem and ensuring that the learning needs of each student could be met in a more analytical and automated way.

A growth mindset

Maths Pathway was a company in startup mode, but they wanted a database and infrastructure that would grow with them. The team had some very ambitious growth plans and there was a need to implement the right technology the first time.

The team at Maths Pathway was also looking for a solution that enabled the analytical tools to perform a highly personalized solution for each of their end-point customers—the students, their teachers, and their schools. Being a startup, the team from Maths Pathway was also looking for a managed service to look after their database and the backend infrastructure on Microsoft Azure, so that they could concentrate their resources on their application and customer acquisition.

Solution

Maths Pathway have taken the typical personalization use case of Cassandra to deliver a solution that enables the tailoring of individual maths learning programs for individual students. The performance of their database enables analytical computation and delivery of the ongoing individualized solutions for the students. Maths Pathway has achieved an amazing 180% growth since inception and are currently providing personalized assessments for over 15,000 students.

Cassandra has delivered the seamless scaling that the team is looking for, building the database for the future to ensure that the underlying Microsoft Azure infrastructure and technology will be able to grow rapidly with the company and future plans. As they add more regions, schools, and students they just add more nodes. Having a managed service looking after the Maths Pathway Cassandra clusters has also allowed them to concentrate on continually refining algorithms and the Maths Pathway solution.

“Instaclustr has enabled us to get underway quickly, the support team have been there from the beginning helping us to get it right the first time with our schema and architecture.”

Richard Wilson, Co-Founder of Maths Pathway

NetApp® Instaclustr specializes in open source technologies for enterprises. Our managed platform streamlines data infrastructure management, backed by experts who ensure ongoing performance, scalability, and optimization. This enables companies to focus on building cutting edge applications at lower costs.