CHEGG RELIES ON PYTHIAN FOR MYSQL AND CASSANDRA OPERATIONS AND ARCHITECTURE

Chegg puts students first. As the leading student-first connected learning platform, the company makes higher education more affordable, more accessible, and more successful for students. Based in Santa Clara, CA, Chegg specializes in online textbook rentals (both in physical and digital formats), homework help, scholarships, course reviews, and internship matching.

BUSINESS NEED

Chegg came to Pythian (formerly Blackbird.io) in 2009 because they didn't have any in-house database support. They needed to scale their architecture as their business grew from a start-up to an IPO. Without expertise and support in managing large, distributed, and complex persistence tiers, Chegg's data management and business performance would be compromised.

SOLUTION

Pythian (formerly Blackbird.io) provided ongoing architectural support, incident and problem management, and multi-region high availability.

RESULT

Migrated from a monolithic MySQL environment to over 50 MySQL clusters hosted in Amazon Web Services, 5 years of 24x7 operational excellence, increased velocity, efficiency, performance, availability, and scale. Flexible support of MySQL, MongoDB®, Cassandra, and Amazon Cloud operations.

“ It’s been a great fit from the beginning. Pythian has done such a good job with us over the years. We’ve outsourced most of our difficult database work as a private company and as a public company which is a testament to the quality of work provided by Pythian. ” — Chuck Geiger, CTO
SOLUTION
In the first year of their relationship, Pythian revamped Chegg’s MySQL backup and recovery architecture and processes, implemented agile and flexible database schema and SQL review and release processes, and broke out Chegg’s monolithic MySQL environment to a functionally partitioned environment utilizing replication and read/write splitting for scale.

Throughout this year, Pythian’s DBA team provided 24x7 operations and incident management support and continual architectural guidance. They have provided architectural guidance, database operations, and 24x7 on-call support for Chegg’s MySQL, MongoDB, and Cassandra environments for the past five years—prior to, during, and after their IPO. Many years later, Chegg still has no in-house DBAs, and relies on Pythian’s expertise for all their data management needs.

After year one, Pythian spearheaded an implementation on Amazon Web Services’ cloud for the elasticity needed by an educational application’s cyclical peaks. Chegg’s partnership with Amazon and Pythian has allowed for rapid growth and constant evolution without sacrificing performance.

RESULT
Using Pythian’s core value of continuous improvement, the supporting database team has evolved their core processes around incident, problem, release, and change management. Chegg’s developers have grown to rely on Pythian for reviewing SQL, data models, data management and performance.

ABOUT PYTHIAN
Pythian is a global leader in data consulting and managed services. Since 1997, we have specialized in planning, deploying, and managing business-critical data systems for large and mid-market enterprises. Learn more about Pythian and its elite teams of data experts at www.pythian.com.